PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

Golden Casting Corporation 1616 Tenth Street Columbus, Indiana 47201

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T005-6001-00006

Issued by: Original Signed by Janet McCabe
Janet G. McCabe, Assistant Commissioner
Office of Air Quality

Issuance Date: April 12, 2002
Expiration Date: April 12,2007

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Quarterly Reports
Quarterly Deviation and Compliance Monitoring Report

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates stationary gray iron foundry.

Responsible Official: President

Source Address: 1616 Tenth Street, Columbus, Indiana 47201 Mailing Address: 1616 Tenth Street, Columbus, Indiana 47201

SIC Code: 3321

County Location: Bartholomew County

Source Location Status: Attainment for all criteria pollutants

Source Status: Part 70 Permit Program

Major, under PSD

Major Source, Section 112 of the Clean Air Act

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1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) The scrap and charge handling process, constructed prior to 1968, identified as 103 with a maximum capacity of 22 tons of metal per hour with emissions uncontrolled.
- (b) One (1) cupola, identified as 101, constructed prior to 1968 with a maximum capacity of 22 tons of metal per hour with emissions controlled by a baghouse, BH-3, and an afterburner, AB-1, exhausting through stack SC-1.
- (c) Moldmaster pouring process, identified as 315, constructed in 1962 with a maximum capacity of 18 tons of metal per hour and 105 tons of sand per hour with emissions controlled by a baghouse, BH16, exhausting through stack SC-5.
- (d) Moldmaster cooling process, identified as 316 and 317, constructed in 1964 with a maximum capacity of 18 tons of metal per hour and 105 tons of sand per hour with emissions controlled by two (2) baghouses, BH-12 and BH-13, exhausting through stacks SC7A and SC7B.
- (e) Moldmaster casting shakeout process, identified as 318 and 320, constructed in 1964 with a maximum capacity of 18 tons of metal per hour and 105 tons of sand per hour with emissions controlled by one (1) baghouse, BH-1, exhausting through stack SC9.
- (f) Moldmaster sand system and muller, identified as 311 and 313, constructed in 1962 with a maximum capacity of 105 tons of sand per hour with emissions controlled by one (1) rotoclone, RC-1, exhausting through stack SC-6.
- (g) Stationmaster pouring process, identified as 342, constructed before 1977 with a maximum capacity of 7 tons of metal per hour and 40 tons of sand per hour with

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emissions uncontrolled and exhausting internally.

- (h) Stationmaster cooling process, identified as 343, constructed before 1977 with a maximum capacity of 7 tons of metal per hour and 40 tons of sand per hour with emissions uncontrolled and exhausting internally.
- (i) Stationmaster casting shakeout process, identified as 344, constructed in 1994 with a maximum capacity of 7 tons of metal per hour and 40 tons of sand per hour with emissions controlled by one (1) baghouse, BH-15, exhausting through stack SC-12.

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- (j) Stationmaster sand system and muller, identified as 341, constructed before 1977 with a maximum capacity of 40 tons of sand per hour with emissions controlled by one (1) baghouse, BH-15, exhausting through stack SC-12.
- (k) Slinger pouring process, identified as 374, constructed before 1968 with a maximum capacity of 2 tons of metal per hour and 8 tons of sand per hour and emissions controlled by a rotoclone, RC-2, exhausting through stack SC-24.
- (I) Slinger cooling process, identified as 375, constructed before 1968 with a maximum capacity of 2 tons of metal per hour and 8 tons of sand per hour and emissions controlled by a rotoclone, RC-2, exhausting through stack SC-24.
- (m) Slinger casting knockout process, identified as 376, constructed before 1968 with a maximum capacity of 2 tons of metal per hour and 8 tons of sand per hour and emissions controlled by a rotoclone, RC-2, exhausting through stack SC-24.
- (n) Slinger sand system and muller, identified as 371, 372, and 373, constructed before 1968 with a maximum capacity of 8 tons of sand per hour with emissions controlled by one (1) rotoclone, RC-2, exhausting through stack SC-24.
- (o) Shotblasting operations consisting of the following:
 - (1) BMD Blast, identified as 450, to be constructed in 2001, with a maximum capacity of 30 tons of metal per hour with emissions controlled by baghouse BH-10, exhausting through stack SC-22.
 - N. Tumble Blast, identified as 443-1, constructed before 1968 with a maximum capacity of 7 tons of metal per hour with emissions controlled by a baghouse, BH-7, exhausting through stack SC-19A.
 - (3) M. Tumble Blast, identified as 443-2, constructed before 1968 with a maximum capacity of 7 tons of metal per hour with emissions controlled by a baghouse, BH-8, exhausting through stack SC-19B.
 - (4) S. Tumble Blast, identified as 443-3, constructed before 1968 with a maximum capacity of 7 tons of metal per hour with emissions controlled by a baghouse, BH-6, exhausting through stack SC-19C.
 - (5) 42 Blast, identified as 442, constructed before 1977 with a maximum capacity of 18 tons of metal per hour with emissions controlled by a baghouse, BH-14, exhausting through stack SC-18.
 - (6) North Pangborn Blast, identified as 444, constructed before 1968 with a maximum capacity of 7.5 tons of metal per hour with emissions controlled by a

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baghouse, BH-11, exhausting through stack SC-20.

- (p) Grinding operations consisting of the following:
 - (1) Head cleaning and stand grinders, identified as 447, constructed before 1977 with a maximum capacity of 14 tons of metal per hour total with emissions controlled by one (1) baghouse, BH-5, exhausting through stack SC-16.
 - Two (2) Block grinders, identified as 441, constructed in 1986 with a maximum capacity of 16 tons of metal per hour total with emissions controlled by one (1) baghouse, BH-4, exhausting through stack SC-17.
 - (3) Swing grinder, identified as 446, constructed before 1977 with a maximum capacity of 15 tons of metal per hour with emissions controlled by one (1) baghouse, BH-4, exhausting through stack SC-17.
- (q) Core making operations consisting of the following:
 - (1) Four (4) 4-103 Isocure core machines, identified as 201, constructed in 1976 with a maximum capacity of 6 tons of cores per hour total with emissions controlled by a scrubber, SB-2, exhausting through stack SB-2. These core machines are supplied by the B&P mixer.
 - (2) One (1) 4-101 Cold Box core machine, identified as 202, constructed in 1986 with a maximum capacity of 1 ton of cores per hour with emissions controlled by a scrubber, SB-2, exhausting through stack SB-2. This core machine is supplied by the B&P mixer.
 - (3) One (1) 315 D Cold Box core machine, identified as 203, constructed in 1986 with a maximum capacity of 1 ton of cores per hour total with emissions controlled by a scrubber, SB-4, exhausting through stack SB-4. This core machine uses a manual mixer.
 - (4) Two (2) EB-2 Cold Box core machines, identified as 204, constructed in 1993 with a maximum capacity of 2 tons of cores per hour total with emissions controlled by a scrubber, SB-2, exhausting through stack SB-2. These core machines are supplied by the B&P mixer.
 - (5) One (1) 4-102 Isocure core machine, identified as 205, constructed prior to 1977 with a maximum capacity of 1 ton of cores per hour with emissions controlled by a scrubber, SB-4, exhausting through stack SB-4. This core machine uses a manual mixer.
 - (6) One (1) 4-103 Isocure core machine, identified as 206, constructed prior to 1977 with a maximum capacity of 1.5 ton of cores per hour with emissions controlled by a scrubber, SB-3, exhausting through stack SB-3. This core machine is supplied by an auger mixer.
 - (7) One (1) Insta Draw Isocure core machine, identified as 207, constructed prior to 1977 with a maximum capacity of 1 ton of cores per hour with emissions controlled by a scrubber, SB-5, exhausting through stack SB-5.
 - (8) One (1) Pepset core system, identified as 208, constructed prior to 1970 with a maximum capacity of 2 tons of cores per hour with emissions uncontrolled

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exhausting through stack SU-14.

(9) One (1) Airset core system, identified as 209, constructed prior to 1977 with a maximum capacity of 2 tons of cores per hour with emissions uncontrolled exhausting through stack SU-15.

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- (10) One (1) Sutter core machine, identified as 210, constructed before 1977 with a maximum capacity of 1 tons of cores per hour with emissions uncontrolled exhausting internally.
- (11) Three (3) Demler core machines, all three identified as 211, constructed before 1977 with a maximum capacity of 2 tons of cores per hour total with emissions uncontrolled exhausting internally.
- (12) Three (3) Shalco core machines, identified as 213, constructed before 1977 with a maximum capacity of 1 ton of cores per hour with emissions uncontrolled exhausting internally.
- (13) One (1) core machine, identified as 214, constructed before 1977 with a maximum capacity of 1 ton of cores per hour with emissions uncontrolled exhausting internally.
- (14) Two (2) MC5 core machines, identified as 215, constructed before 1977 with a maximum capacity of 1 ton of cores per hour with emissions uncontrolled exhausting internally.
- (15) One (1) Shell core machine, identified as 216, constructed before 1977 with a maximum capacity of 1 ton of cores per hour with emissions uncontrolled exhausting internally.
- (16) Two (2) Isocure core machines and sand handling system, identified as 200, constructed in 1997 and 1998 with a maximum capacity of 12.3 tons of cores per hour with emissions controlled by an acid scrubber, SB-1, for VOC control and a cartridge filter for particulate control exhausting through stack SB-1.
- (17) One (1) core sand handling system, constructed in 1997 with a maximum capacity of 123 tons of sand per hour with particulate emissions controlled by a cartridge filter and exhausting through stack SB-1.
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) The following equipment related to manufacturing activities not resulting in the emission of HAPs; brazing equipment, cutting torches, soldering equipment, welding equipment.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

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(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

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SECTION B

GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)] B.6

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect (a) information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]
- The Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. (c)

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When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2. Subpart B.

B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.
- (b) Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.
- (c) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (d) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V

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Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]
 - (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, . IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.12 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,

Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

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- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- In any enforcement proceeding, the Permittee seeking to establish the occurrence of an (c) emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 (e) IAC 2-7-4-(c)(10) be revised in response to an emergency.
- Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more (f) than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12] B.13

Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit (a) shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect Golden Casting Corporation Columbus, Indiana Permit Reviewer: Nisha Sizemore Page 16 of 60 OP No. T005-6001-00006

such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(7)]

B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted

by this permit.

- (b) All previous registrations and permits are superseded by this permit.
- B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

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(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.
- B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]
 - (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
 - (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
 - (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
 - (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

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B.17 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
 - (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3] If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)] If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

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Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]
 - (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
 - (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.
- B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]
 - (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
 - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance

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of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

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(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
 The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]

 The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- B.21 Source Modification Requirement [326 IAC 2-7-10.5]

 A modification, construction, or reconstruction is governed by 326 IAC 2 and 326 IAC 2-7-10.5.
- B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy any records that must be kept under the conditions of this

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permit;

- (c) Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

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SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute (a) averaging period as determined in 326 IAC 5-1-4.
- Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (b) (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A. Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

Open Burning [326 IAC 4-1] [IC 13-17-9] C.3

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute, rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit(s) vented to the control equipment are in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

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C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control
 The Permittee shall comply with the applicable emission control procedures in 326 IAC
 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4, emission control requirements
 are applicable for any removal or disturbance of RACM greater than three (3) linear feet
 on pipes or three (3) square feet on any other facility components or a total of at least
 0.75 cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector
 The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator,
 prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to
 thoroughly inspect the affected portion of the facility for the presence of asbestos. The

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requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.9 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

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in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

- C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
 - (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
 - (b) Whenever a condition in this permit requires the measurement of a temperature, flow rate, or pH level, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
 - (c) The Permittee may request the IDEM, OAQ to approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

C.14 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less often than once per hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3] Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

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(b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

The ERP does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
- (c) A verification to IDEM, OAQ, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.17 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected time frame for taking reasonable response steps.

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steps taken.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response

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- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

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(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this
 permit, the Permittee shall take appropriate corrective actions. The Permittee shall
 submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of
 receipt of the test results. The Permittee shall take appropriate action to minimize
 excess emissions from the affected facility while the corrective actions are being
 implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- C.19 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]
 - (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.
 - (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The annual emission statement required by this permit shall be considered timely if the

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date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:
 - Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report(s) do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.22 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for

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recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] The scrap and charge handling process, constructed prior to 1968, identified as 103 with a maximum capacity of 22 tons of metal per hour with emissions uncontrolled.

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(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the scrap and charge handling process shall not exceed 32.5 pounds per hour when operating at a process weight rate of 22 tons of charge materials per hour. The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

SECTION D.2 FACILI

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FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

One (1) cupola, identified as 101, constructed prior to 1968 with a maximum capacity of 22 tons of metal per hour with emissions controlled by a baghouse, BH-3, and an afterburner, AB-1, exhausting through stack SC-1.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter Emissions [326 IAC 11-1]

Pursuant to 326 IAC 11-1-1 (Emission Limitations for Specific Types of Operations), the particulate matter emissions from the cupola shall not exceed 38.4 pounds per hour when operating at a process weight rate of 22 tons of metal per hour.

D.2.2 Cupola Maximum Capacity

The maximum melt rate of the cupola (101) shall not exceed 22 tons of metal per hour. Any change or modification to this unit that would increase the capacity of the unit will need prior approval from IDEM.

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the cupola, cupola charge door, cupola cap, baghouse, and afterburner.

Compliance Determination Requirements

D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Within 180 days after issuance of this permit, the Permittee shall perform PM testing on the cupola (101) using methods as approved by the Commissioner, in order to demonstrate compliance with Conditions D.2.1 and D.2.2. These tests shall be repeated at least once every two and a half (2.5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.2.5 Control Equipment [326 IAC 9-1]

- (a) In order to comply with the requirements of Conditions D.2.1, the baghouse BH-3 for PM and PM10 control shall be in operation at all times when the cupola is in operation and during startup of the cupola.
- (b) Pursuant to 326 IAC 9-1 (CO Emissions), the afterburner AB-1 shall be in operation at all times when the cupola (101) is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.6 Visible Emissions Notations

(a) Visible emission notations of the cupola (101) stack exhaust, the cupola charge door, and the cupola cap shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

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For processes operated continuously, "normal" means those conditions prevailing, or (b) expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

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- In the case of batch or discontinuous operations, readings shall be taken during that part (c) of the operation that would normally be expected to cause the greatest emissions.
- A trained employee is an employee who has worked at the plant at least one (1) month (d) and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.2.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the cupola (101) at least once per shift when the cupola (101) is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 5.0 and 12.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C -Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.2.8 **Baghouse Inspections**

An inspection shall be performed each calendar quarter of all bags controlling the cupola process when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

Broken or Failed Bag Detection

In the event that bag failure has been observed.

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C -Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

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(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.10 Record Keeping Requirements

- (a) In order to document compliance with Condition D.2.6, the Permittee shall maintain records of visible emission notations of the cupola stack exhaust(s), cupola cap, and cupola charge door once per shift.
- (b) In order to document compliance with condition D.2.7, the Permittee shall maintain records of the inlet and outlet differential static pressure once per shift during normal operation when venting to the atmosphere.
- (c) In order to document compliance with Condition D.2.8, the Permittee shall maintain records of the results of the inspections required under Condition D.2.8 and the dates the vents are redirected.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

SECTION D.3

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FACILITY OPERATION CONDITIONS

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Facility Description [326 IAC 2-7-5(15)]

- (a) Moldmaster pouring process, identified as 315, constructed in 1962 with a maximum capacity of 18 tons of metal per hour and 105 tons of sand per hour with emissions controlled by a baghouse, BH16, exhausting through stack SC-5.
- (b) Moldmaster cooling process, identified as 316 and 317, constructed in 1964 with a maximum capacity of 18 tons of metal per hour and 105 tons of sand per hour with emissions controlled by two (2) baghouses, BH-12 and BH-13, exhausting through stacks SC7A and SC7B.
- (c) Moldmaster casting shakeout process, identified as 318 and 320, constructed in 1964 with a maximum capacity of 18 tons of metal per hour and 105 tons of sand per hour with emissions controlled by one (1) baghouse, BH-1, exhausting through stack SC9.
- (d) Moldmaster sand system and muller, identified as 311 and 313, constructed in 1962 with a maximum capacity of 105 tons of sand per hour with emissions controlled by one (1) rotoclone, RC-1, exhausting through stack SC-6.
- (e) Stationmaster pouring process, identified as 342, constructed before 1977 with a maximum capacity of 7 tons of metal per hour and 40 tons of sand per hour with emissions uncontrolled and exhausting internally.
- (f) Stationmaster cooling process, identified as 343, constructed before 1977 with a maximum capacity of 7 tons of metal per hour and 40 tons of sand per hour with emissions uncontrolled and exhausting internally.
- (g) Stationmaster casting shakeout process, identified as 344, constructed in 1994 with a maximum capacity of 7 tons of metal per hour and 40 tons of sand per hour with emissions controlled by one (1) baghouse, BH-15, exhausting through stack SC-12.
- (h) Stationmaster sand system and muller, identified as 341, constructed before 1977 with a maximum capacity of 40 tons of sand per hour with emissions controlled by one (1) baghouse, BH-15, exhausting through stack SC-12.
- (i) Slinger pouring process, identified as 374, constructed before 1968 with a maximum capacity of 2 tons of metal per hour and 8 tons of sand per hour and emissions controlled by a rotoclone, RC-2, exhausting through stack SC-24.
- (j) Slinger cooling process, identified as 375, constructed before 1968 with a maximum capacity of 2 tons of metal per hour and 8 tons of sand per hour and emissions controlled by a rotoclone, RC-2, exhausting through stack SC-24.
- (k) Slinger casting knockout process, identified as 376, constructed before 1968 with a maximum capacity of 2 tons of metal per hour and 8 tons of sand per hour and emissions controlled by a rotoclone, RC-2, exhausting through stack SC-24.
- (I) Slinger sand system and muller, identified as 371, 372, and 373, constructed before 1968 with a maximum capacity of 8 tons of sand per hour with emissions controlled by one (1) rotoclone, RC-2, exhausting through stack SC-24.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the following conditions shall apply:

(a) The particulate matter (PM) from the baghouse BH-16 controlling the Moldmaster pouring/casting process shall not exceed 53.4 pounds per hour when operating at a process weight rate of 123 tons of metal castings and sand molds and cores per hour.

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- (b) The particulate matter (PM) from the baghouses BH-12 and BH-13 controlling the Moldmaster casting cooling process shall not exceed 53.4 pounds per hour when operating at a process weight rate of 123 tons of metal castings and sand molds and cores per hour.
- (c) The particulate matter (PM) from the baghouse BH-1 controlling the Moldmaster casting shakeout process shall not exceed 53.4 pounds per hour when operating at a process weight rate of 123 tons of metal castings and sand molds and cores per hour.
- (d) The particulate matter (PM) from the rotoclone RC1 controlling the Moldmaster sand system shall not exceed 51.8 pounds per hour when operating at a process weight rate of 105 tons of sand per hour.
- (e) The particulate matter (PM) from the Stationmaster pouring/casting process shall not exceed 44.0 pounds per hour when operating at a process weight rate of 47 tons of metal castings and sand molds and cores per hour.
- (f) The particulate matter (PM) from the Stationmaster casting cooling process shall not exceed 44.0 pounds per hour when operating at a process weight rate of 47 tons of metal castings and sand molds and cores per hour.
- (g) The particulate matter (PM) from the baghouse BH15 controlling the Stationmaster shakeout and sand handling process shall not exceed 44.0 pounds per hour when operating at a process weight rate of 47 tons of metal castings and sand molds and cores per hour.
- (h) The particulate matter (PM) from the rotoclone RC2 controlling the Slinger pouring/casting process, the Slinger casting cooling process, the Slinger shakeout process, and the Slinger sand handling process shall not exceed 19.2 pounds per hour when operating at a process weight rate of 10 tons of metal and sand molds and cores per hour.

The pound per hour limitation for (h) was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where $E =$ rate of emission in pounds per hour; and $P =$ process weight rate in tons per hour

The pounds per hour limitations for (a), (b), (c), (d), (e), (f), and (g) were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate greater than 60,000 pounds per hour shall be accomplished by use of the equation:

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 $E = 55 P^{0.11} - 40$

where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.3.2 Particulate Matter (PM) [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable to the Stationmaster casting shakeout system, the following conditions shall apply:

- (a) The PM emissions from the baghouse BH15 controlling the Stationmaster casting shakeout and sand handling process and the shall not exceed 5.48 pounds per hour.
- (b) The PM-10 emissions from the baghouse BH15 controlling the Stationmaster casting shakeout and sand handling process shall not exceed 3.20 pounds per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 shall not apply.

D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the control devices listed in this section.

Compliance Determination Requirements

D.3.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Within 24 months after issuance of this permit, the Permittee shall perform PM and PM10 testing on the baghouse BH15 controlling the Stationmaster shakeout and sand handling processes, using methods as approved by the Commissioner, in order to demonstrate compliance with Condition D.3.1 and D.3.2. PM10 includes filterable and condensible PM10. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.3.5 Particulate Matter Controls

In order to comply with the requirements of Conditions D.3.1 and D.3.2, all of the control devices listed in this section shall be in operation at all times when the associated processes are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.6 Visible Emissions Notations

- (a) Visible emission notations of all of the controlled stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency

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and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.3.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across each of the baghouses used in conjunction with the processes listed in this section at least once per shift when the associated process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 5.0 and 12.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instruments used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.3.8 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the foundry processes when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.3.9 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C -Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.10 Record Keeping Requirements

(a) In order to document compliance with Condition D.3.6, the Permittee shall maintain

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records of visible emission notations of all the controlled stack exhausts once per shift.

- (b) In order to document compliance with condition D.3.7, the Permittee shall maintain records of the inlet and outlet differential static pressure once per shift during normal operation when venting to the atmosphere.
- (c) In order to document compliance with Condition D.3.8, the Permittee shall maintain records of the results of the inspections required under Condition D.3.8 and the dates the vents are redirected.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

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SECTION D.4

Facility Description [326 IAC 2-7-5(15)]

- (a) Shotblasting operations consisting of the following:
 - (1) BMD Blast, identified as 450, to be constructed in 2001, with a maximum capacity of 30 tons of metal per hour with emissions controlled by baghouse BH-10, exhausting through stack SC-22.

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- (2) N. Tumble Blast, identified as 443-1, constructed before 1968 with a maximum capacity of 7 tons of metal per hour with emissions controlled by a baghouse, BH-7, exhausting through stack SC-19A.
- (3) M. Tumble Blast, identified as 443-2, constructed before 1968 with a maximum capacity of 7 tons of metal per hour with emissions controlled by a baghouse, BH-8, exhausting through stack SC-19B.
- (4) S. Tumble Blast, identified as 443-3, constructed before 1968 with a maximum capacity of 7 tons of metal per hour with emissions controlled by a baghouse, BH-6, exhausting through stack SC-19C.
- (5) 42 Blast, identified as 442, constructed before 1977 with a maximum capacity of 18 tons of metal per hour with emissions controlled by a baghouse, BH-14, exhausting through stack SC-18.
- (6) North Pangborn Blast, identified as 444, constructed before 1968 with a maximum capacity of 7.5 tons of metal per hour with emissions controlled by a baghouse, BH-11, exhausting through stack SC-20.
- (b) Grinding operations consisting of the following:
 - (1) Head cleaning and stand grinders, identified as 447, constructed before 1977 with a maximum capacity of 14 tons of metal per hour total with emissions controlled by one (1) baghouse, BH-5, exhausting through stack SC-16.
 - Two (2) Block grinders, identified as 441, constructed in 1986 with a maximum capacity of 16 tons of metal per hour total with emissions controlled by one (1) baghouse, BH-4, exhausting through stack SC-17.
 - (3) Swing grinder, identified as 446, constructed before 1977 with a maximum capacity of 15 tons of metal per hour with emissions controlled by one (1) baghouse, BH-4, exhausting through stack SC-17.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the following conditions shall apply:

(a) Pursuant to Significant Source Modification 005-11795-00006 issued August 29, 2000,

the particulate matter (PM) from the baghouse BH-10 controlling the BMD Blast shotblast machine shall not exceed 40.0 pounds per hour when operating at a process weight rate of 30 tons of metal castings per hour.

- (b) The particulate matter (PM) from the baghouse BH-5 controlling the head cleaning and stand grinders shall not exceed 24.0 pounds per hour when operating at a process weight rate of 14 tons of metal castings per hour.
- (c) The particulate matter (PM) from the baghouse BH-7 controlling the N. Tumble Blast shotblast machine shall not exceed 15.1 pounds per hour when operating at a process weight rate of 7 tons of metal castings per hour.
- (d) The particulate matter (PM) from the baghouse BH-8 controlling the M. Tumble Blast shotblast machine shall not exceed 15.1 pounds per hour when operating at a process weight rate of 7 tons of metal castings per hour.
- (e) The particulate matter (PM) from the baghouse BH-6 controlling the S. Tumble Blast shotblast machine shall not exceed 15.1 pounds per hour when operating at a process weight rate of 7 tons of metal castings per hour.
- (f) The particulate matter (PM) from the baghouse BH-14 controlling the 42 Blast shotblast machine shall not exceed 28.4 pounds per hour when operating at a process weight rate of 18 tons of metal castings per hour.
- (g) The particulate matter (PM) from the baghouse BH-11 controlling the North Pangborn Blast shotblast machine shall not exceed 15.8 pounds per hour when operating at a process weight rate of 7.5 tons of metal castings per hour.
- (h) The particulate matter (PM) from the baghouse BH-4 controlling the block grinders and the swing grinder shall not exceed a combined total of 51.4 pounds per hour when operating at process weight rates of 16 and 15 tons of metal castings per hour, respectively.

The pounds per hour limitations for (b) through (h) were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where $E =$ rate of emission in pounds per hour; and $P =$ process weight rate in tons per hour

The pounds per hour limitation for (a) was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate greater than 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55 P^{0.11} - 40$$
 where $E =$ rate of emission in pounds per hour; and $P =$ process weight rate in tons per hour

D.4.2 Particulate Matter (PM) [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable to the BMD Blast shotblast machine and the grinders, the following conditions shall apply:

(a) Pursuant to Significant Source Modification 005-11795-00006 issued August 29, 2000,

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the PM emissions from the baghouse BH10 controlling the BMD Blast shotblast machine shall not exceed 5.48 pounds per hour.

- (b) Pursuant to Significant Source Modification 005-11795-00006 issued August 29, 2000, the PM10 emissions from the baghouse BH10 controlling the BMD Blast shotblast machine shall not exceed 3.19 pounds per hour.
- (c) The PM emissions from the baghouse BH5 controlling the head cleaning and stand grinders shall not exceed 5.25 pounds per hour.
- (d) The PM emissions from the baghouse BH4 controlling the two (2) block grinders shall not exceed 0.23 pound per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 shall not apply.

D.4.3 Operation Limitations [326 IAC 2-2]

- (a) Pursuant to Significant Source Modification 005-11795-00006 issued August 29, 2000, when the shotblast unit identified as 450 is fully operational, the two (2) existing shotblast units, identified as 445 and the south Pangborn blast, shall be removed from service. The shotblast unit identified as 450 shall not be operated at the same time as either of the two (2) existing shotblast units, identified as 445 and the south Pangborn blast.
- (b) Pursuant to Significant Source Modification 005-11795-00006 issued August 29, 2000, the shotblast unit identified as 450 shall limit total daily casting throughput to 444 tons per day (equivalent to 162,060 tons per year).

D.4.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the control devices listed in this section.

Compliance Determination Requirements

D.4.5 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Between June 2005 and January 2006, the Permittee shall perform PM and PM10 testing on the baghouse BH10 used to control the BMD 450 Blast shotblast machine using methods as approved by the Commissioner, in order to demonstrate compliance with Conditions D.4.1 and D.4.2. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.4.6 Particulate Matter Controls

In order to comply with the requirements of Conditions D.4.1 and D.4.2, all of the control devices listed in this section shall be in operation at all times when the associated shotblast machine or grinder is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.7 Visible Emissions Notations

- (a) Visible emission notations of all the controlled stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or

expected to prevail, eighty percent (80%) of the time the process is in operation, not

counting startup or shut down time.

- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.4.8 Parametric Monitoring

The Permittee shall record the total static pressure drop across each of the baghouses used in conjunction with the shotblast machines and grinders at least once per shift when the associated shotblast machine or grinder is in operation when venting to the atmosphere. When for any one reading, the pressure drop across a baghouse is outside the normal range of 4.0 and 11.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instruments used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.4.9 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the castings cleaning and finishing process when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.4.10 Broken or Failed Bag Detection

In the event that bag failure has been observed.

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C -Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

For single compartment baghouses, failed units and the associated process will be shut (b) down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.11 Record Keeping Requirements

- In order to document compliance with Condition D.4.7, the Permittee shall maintain records of visible emission notations of all of the controlled stack exhausts once per shift.
- (b) In order to document compliance with condition D.4.8, the Permittee shall maintain records of the inlet and outlet differential static pressure once per shift during normal operation when venting to the atmosphere.
- In order to document compliance with Condition D.4.9, the Permittee shall maintain (c) records of the results of the inspections required under Condition D.4.9 and the dates the vents are redirected.
- (d) Pursuant to Significant Source Modification 005-11795-00006 issued August 29, 2000, and to document compliance with D.4.3(b), records shall be kept of the weight of casting throughput to shotblast machine 450.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.12 Reporting Requirements

Pursuant to Significant Source Modification 005-11795-00006 issued August 29, 2000, a guarterly summary of the information to document compliance with Conditions D.4.3 shall be submitted to the address in Section C - General Reporting Requirements, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.5

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]
Core making operations consisting of the following:

- (a) Four (4) 4-103 Isocure core machines, identified as 201, constructed in 1976 with a maximum capacity of 6 tons of cores per hour total with emissions controlled by a scrubber, SB-2, exhausting through stack SB-2. These core machines are supplied by the B&P mixer.
- (b) One (1) 4-101 Cold Box core machine, identified as 202, constructed in 1986 with a maximum capacity of 1 ton of cores per hour with emissions controlled by a scrubber, SB-2, exhausting through stack SB-2. This core machine is supplied by the B&P mixer.
- (c) One (1) 315 D Cold Box core machine, identified as 203, constructed in 1986 with a maximum capacity of 1 ton of cores per hour total with emissions controlled by a scrubber, SB-4, exhausting through stack SB-4. This core machine uses a manual mixer.
- (d) Two (2) EB-2 Cold Box core machines, identified as 204, constructed in 1993 with a maximum capacity of 2 tons of cores per hour total with emissions controlled by a scrubber, SB-2, exhausting through stack SB-2. These core machines are supplied by the B&P mixer.
- (e) One (1) 4-102 Isocure core machine, identified as 205, constructed prior to 1977 with a maximum capacity of 1 ton of cores per hour with emissions controlled by a scrubber, SB-4, exhausting through stack SB-4. This core machine uses a manual mixer.
- (f) One (1) 4-103 Isocure core machine, identified as 206, constructed prior to 1977 with a maximum capacity of 1.5 ton of cores per hour with emissions controlled by a scrubber, SB-3, exhausting through stack SB-3. This core machine is supplied by an auger mixer.
- (g) One (1) Insta Draw Isocure core machine, identified as 207, constructed prior to 1977 with a maximum capacity of 1 ton of cores per hour with emissions controlled by a scrubber, SB-5, exhausting through stack SB-5.
- (h) One (1) Pepset core system, identified as 208, constructed prior to 1970 with a maximum capacity of 2 tons of cores per hour with emissions uncontrolled exhausting through stack SU-
- (i) One (1) Airset core system, identified as 209, constructed prior to 1977 with a maximum capacity of 2 tons of cores per hour with emissions uncontrolled exhausting through stack SU-15.
- (j) One (1) Sutter core machine, identified as 210, constructed before 1977 with a maximum capacity of 1 tons of cores per hour with emissions uncontrolled exhausting internally.
- (k) Three (3) Demler core machines, all three identified as 211, constructed before 1977 with a maximum capacity of 2 tons of cores per hour total with emissions uncontrolled exhausting internally.
- (I) Three (3) Shalco core machines, identified as 213, constructed before 1977 with a maximum capacity of 1 ton of cores per hour with emissions uncontrolled exhausting internally.
- (m) One (1) core machine, identified as 214, constructed before 1977 with a maximum capacity of 1 ton of cores per hour with emissions uncontrolled exhausting internally.
- (n) Two (2) MC5 core machines, identified as 215, constructed before 1977 with a maximum capacity of 1 ton of cores per hour with emissions uncontrolled exhausting internally.
- (o) One (1) Shell core machine, identified as 216, constructed before 1977 with a maximum capacity of 1 ton of cores per hour with emissions uncontrolled exhausting internally.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

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Emission Limitations and Standards [326 IAC 2-7-5(1)]

Volatile Organic Compounds (VOC) [326 IAC 8-1-6] [326 IAC 2-2]

In order to render the requirements of 326 IAC 8-1-6 (BACT), 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable, the following conditions shall apply:

- The resin usage for core machines 202 and 203 combined (two machines total) shall not (a) exceed 373,500 pounds per twelve consecutive month period. TEA usage for core machines 202 and 203 combined (two machines total) shall not exceed 31.125 pounds per twelve consecutive month period.
- (b) The resin usage for core machines 204 combined (two machines) shall not exceed 373,500 pounds per twelve consecutive month period. TEA usage for core machines 204 combined (two machines) shall not exceed 31,125 pounds per twelve consecutive month period.
- The VOC emissions (not including TEA) from each of the cold box core machines (c) identified as emission units 202, 203, and 204 shall not exceed 0.05 pounds per pound of resin.
- (d) The TEA emissions from each of the cold box core machines identified as emission units 202, 203, and 204 shall not exceed 2.0 pounds per ton of cores.

Therefore, the requirements of 326 IAC 8-1-6 (BACT) shall not apply. Compliance with above limits will also render the requirements of 326 IAC 2-2 and 40 CFR 52.21 not applicable.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.2 Record Keeping Requirements

- In order to document compliance with Conditions D.5.1 (a) and (b), the Permittee shall maintain records of the amount of TEA and resin usage for each of the core machines identified as 202, 203, and 204.
- (b) To document compliance with Condition D.5.1 (c), the Permittee shall maintain records of the VOC content of the binders used for all of the Isocure core machines each month.
- All records shall be maintained in accordance with Section C General Record Keeping (c) Requirements, of this permit.

D.5.3 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.5.1 (a) and (b) shall be submitted to the address in Section C - General Reporting Requirements, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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SECTION D.6

FACILITY OPERATION CONDITIONS

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Facility Description [326 IAC 2-7-5(15)] Coremaking operations consisting of the following:

- Two (2) Isocure core machines and sand handling system, identified as 200, constructed in (a) 1997 and 1998 with a maximum capacity of 12.3 tons of cores per hour with emissions controlled by an acid scrubber, SB-1, for VOC control and a bin vent filter for particulate control exhausting through stack SB-1.
- (b) One (1) core sand handling system, constructed in 1997 with a maximum capacity of 123 tons of sand per hour with particulate emissions controlled by a bin vent filter and exhausting through stack SB-1.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

Volatile Organic Compounds (VOC) [326 IAC 8-1-6] [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3, 326 IAC 8-1-6 (BACT), and construction permit 005-7081-00006 issued on March 12, 1997, PSD BACT for the two Isocure core machines (200) shall consist of the following conditions:

- The volatile organic compounds (VOC) generated from the catalyst added to the Isocure (a) core machines (200) shall be controlled by an acid scrubber system. The VOC emissions from stack SB-1 shall not exceed 1.34 pounds per hour.
- The core machines (200) shall be limited to a maximum production rate of 5,417 tons of (b) cores per month.

This condition will also satisfy the requirements of 326 IAC 8-1-6 (BACT).

Particulate Matter [326 IAC 2-2] D.6.2

Pursuant to CP005-7081, issued on March 12, 1997, in order to render the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable to the core sand handling process, the following conditions shall apply:

- The PM emissions from the bin vent filter controlling the core sand handling process (a) shall not exceed 5.48 pounds per hour.
- The PM10 emissions from the bin vent filter controlling the core sand handling process (b) shall not exceed 3.20 pounds per hour.
- The outlet grain loading from the bin vent filter controlling the core sand handling (c) process shall not exceed 0.03 grains per dry standard cubic foot of exhaust air.

D.6.3 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the core sand handling process shall not exceed 53.4 pounds per hour when operating at a process weight rate of 123 tons of sand per hour. The pounds per hour limitation was calculated with the following equation:

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Interpolation and extrapolation of the data for the process weight rate greater than 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 55 P^{0.11} - 40$ where E =rate of emission in pounds per hour; and P =process weight rate in tons per hour

D.6.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the scrubber and the bin vent filter.

Compliance Determination Requirements

D.6.5 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Within 180 days after issuance of this permit, the Permittee shall perform VOC testing on the scrubber SB-1 controlling the core machines, using methods as approved by the Commissioner, in order to demonstrate compliance with Condition D.6.1. The VOC tests shall be repeated at least once every two and one-half (2.5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.6.6 Control Equipment

- (a) In order to comply with the requirements of Condition D.6.1, the scrubber shall be in operation at all times when either of the associated core machines is in operation.
- (b) In order to comply with the requirements of Conditions D.6.2 and D.6.3, the bin vent filter shall be in operation at all times when the core sand handling process is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.6.7 Scrubber Parametric Monitoring

The Permittee shall monitor and record the acid content, pressure drop, and flow rate of each of the scrubbers, at least once per shift when the associated core machines are in operation when venting to the atmosphere. When for any one reading the pressure drop across one of the scrubbers is outside of the normal range of 1.0 and 4.0 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. When for any one reading the flow rate of one of the scrubbers is less than 50 gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports. When for any one reading, the acid content of one of the scrubbers is below a pH level of 2, or an acid content established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading, or when the flow rate is below the above mentioned minimum level for any one reading, or the pH level is above the above mentioned maximum for any one reading. Failure to take response steps in accordance with Section C -Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instruments used for determining the pressure, flow rates, and pH levels shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

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D.6.8 Scrubber Inspections

An inspection shall be performed each calender quarter of the scrubber controlling the core machines when venting to the atmosphere. A scrubber inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors.

D.6.9 Failure Detection

In the event that a scrubber failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.6.10 Visible Emissions Notations

- (a) Visible emission notations of the core room sand handling stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C -Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.6.11 Bin vent Filter Inspections

An inspection shall be performed each calendar quarter of the bin vent filter controlling the core room sand handling process when venting to the atmosphere.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.12 Record Keeping Requirements

- In order to document compliance with condition D.6.7, the Permittee shall maintain records of the following operational parameters for the scrubber once per shift during normal operation:
 - (1) pressure drop;
 - (2) flow rate; and

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- (3) acid content (pH level).
- (b) In order to document compliance with Condition D.6.8, the Permittee shall maintain records of the results of the inspections required under Condition D.6.8 and the dates the vents are redirected.
- In order to document compliance with Conditions D.6.1, the Permittee shall maintain (c) records of the amount of sand throughput for the core machines.
- (d) In order to document compliance with Condition D.6.10, the Permittee shall maintain records of visible emission notations of the core room sand handling stack exhausts once per shift.
- (e) In order to document compliance with Condition D.6.12, the Permittee shall maintain records of the results of the inspections required under Condition D.6.12 and the dates the vents are redirected.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.6.13 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.6.1 shall be submitted to the address in Section C - General Reporting Requirements, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.7

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Insignificant Activities

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The following equipment related to manufacturing activities not resulting in the emission of HAPs; brazing equipment, cutting torches, soldering equipment, welding equipment.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the above listed processes shall not exceed the pounds per hour emission rate established as "E" in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$

where E = rate of emission in pounds per hour; and

P = process weight rate in tons per hour

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION**

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PART 70 OPERATING PERMIT CERTIFICATION

Golden Casting Corporation Source Name:

1616 Tenth Street, Columbus, Indiana 47201 Source Address: Mailing Address: 1616 Tenth Street, Columbus, Indiana 47201

Part 70 Permit No.: T005-6001-00006
This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.
Please check what document is being certified:
9 Annual Compliance Certification Letter
9 Test Result (specify)
9 Report (specify)
9 Notification (specify)
9 Affidavit (specify)
9 Other (specify)
I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature:
Printed Name:
Title/Position:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

COMPLIANCE BRANCH 100 North Senate Avenue P.O. Box 6015 Indianapolis, Indiana 46206-6015 Phone: 317-233-5674 Fax: 317-233-5967

PART 70 OPERATING PERMIT EMERGENCY OCCURRENCE REPORT

Source Name: Golden Casting Corporation

Source Address: 1616 Tenth Street, Columbus, Indiana 47201 Mailing Address: 1616 Tenth Street, Columbus, Indiana 47201

Part 70 Permit No.: T005-6001-00006

This form	consists	of 2	pages
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9	This is ar	n emergency as defined in 326 IAC 2-7-1(12)
	C	The Permittee must notify the Office of Air Quality (OAQ), within four (4) business
		hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
	С	The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Engagement
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A		Page 2 of 2
Date/Time Emergency started:		
Date/Time Emergency was corrected:		
Was the facility being properly operated at the time of the emergency? Describe:	Υ	N
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other	:	
Estimated amount of pollutant(s) emitted during emergency:		
Describe the steps taken to mitigate the problem:		
Describe the corrective actions/response steps taken:		
Describe the measures taken to minimize emissions:		
If applicable, describe the reasons why continued operation of the facilit imminent injury to persons, severe damage to equipment, substantial los loss of product or raw materials of substantial economic value:		
Form Completed by:		
Title / Position:		
Date:		
Phone:		

A certification is not required for this report.

Phone:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

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	Part 70	Quarterly Report		
Source Name: Source Address: Mailing Address: Part 70 Permit No.: Facility: Parameter: Limit:	BMD shotblast machine throughput of metal case	umbus, Indiana 47201 umbus, Indiana 47201 e 450	eriod	
	YEAI	R:		
	Column 1	Column 2	Column 1 + Column 2	
Month	This Month	Previous 11 Months	12 Month Total	
Month 1				
Month 2				
Month 3				
9 No deviation occurred in this quarter.				
9 Deviation/s occurred in this quarter. Deviation has been reported on:				
Title	e / Position: nature:			

A certification by the "responsible official" as defined by 326 IAC 2-7-1(34) is required for this report.

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

	Pa	art 70 Quarte	erly Report	
Source Name Source Addre Mailing Addre Part 70 Perm Facility: Parameters: Limits:	ess: 1616 Tenth Streetess: 1616 Tenth Streetess: 1616 Tenth Streetess: 1605-6001-0000 Cold box core metotal combined respectively both machines 373,500 pounds 31,125 pounds of	et, Columbus, Indi et, Columbus, Indi 6 achines identified esin usage for botl of resin per 12 co	ana 47201 as identified as 202 are in machines and total consecutive month period secutive month period	nd 203 (two machines total) combined TEA usage for d
		Column 1	Column 2	Column 1 + Column 2
	Month	This Month	Previous 11 Months	12 Month Total
Month 1	resin usage (pounds)			
	TEA usage (pounds			
Month 2	Month 2 resin usage (pounds			
	TEA usage (pounds)			
Month 3	resin usage (pounds)			
	TEA usage (pounds)			
9 No deviation occurred in this quarter. 9 Deviation/s occurred in this quarter. Deviation has been reported on: Submitted by: Title / Position: Signature: Date:				

A certification by the "responsible official" as defined by 326 IAC 2-7-1(34) is required for this report.

Phone:

> Date: Phone:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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	Pa	art 70 Quarte	rly Report	
Source Nam Source Addr Mailing Addr Part 70 Pern Facility: Parameters: Limits:	ess: 1616 Tenth Streens: 1616 Tenth Streenit No.: T005-6001-0000 Cold box core modular total combined reports around the machines 373,500 pounds	et, Columbus, India et, Columbus, India 6 achines identified a esin usage for both of resin per 12 cor	ana 47201 as identified as 204 (combined TEA usage for od
		YEAR:		
		Column 1	Column 2	Column 1 + Column 2
	Month	This Month	Previous 11 Months	12 Month Total
Month 1	resin usage (pounds)			
	TEA usage (pounds			
Month 2 resin usage (pounds				
TEA usage (pounds)				
Month 3	Month 3 resin usage (pounds)			
	TEA usage (pounds)			
	9 Deviation/s occu Deviation has be	•		

A certification by the "responsible official" as defined by 326 IAC 2-7-1(34) is required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

COMPLIANCE DATA SECTION

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Part 70 Quarterly Report

YEAR: _____

Usage

Source Name: Golden Casting Corporation

Source Address: 1616 Tenth Street, Columbus, Indiana 47201 Mailing Address: 1616 Tenth Street, Columbus, Indiana 47201

Part 70 Permit No.: T005-6001-00006

Facility: Two (2) Isocure core machines constructed in 1997, identified as 200

Parameter: Sand Throughput

Submitted by: __ Title / Position: __ Signature: __ Date: __ Phone:

Limit: 5,417 tons of cores per month for both machines total

	Month	tons of cores/month	
	Month 1		
	Month 2		
	Month 3		
No deviat	on occurred in this q	uarter.	
	's occurred in this qua has been reported or		

A certification by the "responsible official" as defined by 326 IAC 2-7-1(34) is required for this report.

Response Steps Taken:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

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PART 70 OPERATING PERMIT QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Golden Casting Corporation Source Address: 1616 Tenth Street, Columbus, Indiana 47201 Mailing Address: 1616 Tenth Street, Columbus, Indiana 47201 Part 70 Permit No.: T005-6001-00006 Months: _____ to _____ Year: _____ Page 1 of 2 This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period". 9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD. 9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD **Permit Requirement** (specify permit condition #) Date of Deviation: **Duration of Deviation: Number of Deviations: Probable Cause of Deviation:** Response Steps Taken: **Permit Requirement** (specify permit condition #) **Date of Deviation: Duration of Deviation: Number of Deviations: Probable Cause of Deviation:**

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	1 uge 2 01 2
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Form Completed By:	
Title/Position:	
Date:	
Phone:	

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Part 70 Operating Permit

Source Name: Golden Casting Corporation

Source Location: 1616 Tenth Street, Columbus, Indiana 47201

County: Bartholomew

SIC Code: 3321

Operation Permit No.: T005-6001-00006 Permit Reviewer: Nisha Sizemore

On October 27, 2000, the Office of Air Quality (OAQ) had a notice published in The Republic, Columbus, Indiana, stating that Golden Casting Corporation had applied for a Part 70 Operating Permit to operate a gray iron foundry. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed. A public hearing was also held on March 27, 2001.

Mr. Charles Mitch provided written comments on the proposed permit during the public comment period. Mr. Mitch also provided comments during the public hearing on March 27, 2001. A summary of the comments is as follows:

Comment #1

Many of the older and more heavily polluting units at the foundry have substantial fewer requirements for emission limits, compliance determination, and compliance monitoring than is applied to newer units in the permit. I request than an explanation for the lesser requirements for these apparently "grandfathered" units be stated in the permit. Some units of particular concern are listed below.

- (1) The cupola furnace is listed as a major source of SO2, with a potential to emit in excess of 100 tons per year. The permit contains no SO2 limits or compliance requirements. This is of particular concern as there is often a pungent sulfur odor around the foundry site. At times this odor is quite noticeable at my home, located more the 1.5 miles from the foundry.
- (2) The cupola furnace is listed as a major source of particulate matter, including PM10, with a potential to emit in excess of 100 tons per year. The permit contains no compliance determination requirements for PM10 from this unit.
- (3) The cupola furnace is listed as a major source of CO, with a potential to emit in excess of 100 tons per year. The permit requires operation of an afterburner to control carbon monoxide emissions. No compliance determination or compliance monitoring requirements for carbon monoxide are included in the permit.
- (4) The moldmaster sand system is listed as a major source of particulate matter, including PM10, with a potential to emit in excess of 100 tons per year. No requirements for

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compliance determination or compliance monitoring are included in the permit for PM or PM10 emissions from this unit.

Additionally, I would like to know how much replacement can be done on this equipment before it's determined that the grandfather exemptions no longer apply. Does IDEM investigate to see if so much replacement is occurring, that it is essentially no longer the same equipment?

Response #1

The rules limiting the Prevention of Significant Deterioration (PSD) were not in effect until 1977 and therefore are not applicable to emission units that were constructed prior to that date and have not been modified since then. The cupola and the moldmaster system were constructed prior to 1977 and therefore are not subject to rules for PSD. Indiana rule 326 IAC 9-1 applies to this source and requires continuous operation of an afterburner to control CO emissions from the cupola melt furnace. The rule does not establish a specific emission limit. The requirement to comply with this rule and operate the afterburner is in Condition D.2.5(b) of the permit. There are no other rules which limit the emissions of SO_2 or CO from the cupola or moldmaster system; therefore, IDEM has no authority to limit the SO_2 and CO emissions from these units.

Indiana's State Implementation Plan (SIP) relies on the PM limits in 326 IAC 6-3-2 (Process Operations) to limit PM10 emissions and protect the National Ambient Air Quality Standards (NAAQs). PM10 did not become a separately regulated pollutant until February 5, 1989. Since the cupola and the moldmaster system were constructed prior to that date and have not been modified since then, IDEM has no authority to separately limit the PM10 emissions from these units.

If the source makes a physical change to these existing units which increases the potential to emit of the units by an amount considered significant by the PSD rules, then such a change would be considered a modification and the units would no longer be "grandfathered" out of the PSD rules. Sources, including Golden Casting, are routinely inspected to ensure that modifications are not made without obtaining the proper permits.

Comment #2

The cupola furnace is described as having a maximum capacity of 22 tons of metal per hour. This is inconsistent with the information Golden Casting has published on its internet web site stating that the cupola furnace is rated at 27 tons per hour (see www.goldencasting.com/prodproc.htm. I request that the actual capacity of the cupola be verified and corrections to the permit made where necessary. This is needed to assure that upgrades to the scrap and charge handling process or to the pouring/casting process do not result in increased throughput to the cupola furnace without proper modification to the operating permit.

Response #2

Golden Casting has verified that the correct maximum capacity of the cupola is 22 tons of metal per hour. The source has indicated that the capacity listed on the website was in error and that it has been corrected. Golden Casting has also informed IDEM that no modifications have been made to the cupola which would have caused an increase in the design melt capacity of the cupola. IDEM has included a condition in the permit (see Condition D.2.2) specifying that the capacity of the cupola may not exceed 22 tons of metal per hour, without first getting prior approval from IDEM.

Comment #3

The table listing actual emissions on page 7 of the technical support document contains questionable data. Emissions of PM are listed as 19 tons per year, while emissions of PM10 are listed as 86 tons per year. It is difficult to believe that PM10 emissions would actually be greater than total PM emissions. I request that this information be verified and corrected where necessary.

Response #3

This source is required to report emissions pursuant to Indiana rule 326 IAC 2-6 (Emission Reporting). This rule does not require sources to report PM emissions separately from PM10 emissions.

However, units where condensible emissions might be present (i.e. metal melt furnaces, fuel combustion sources) may find PM10 emissions exceeding PM emissions. This result from differences in how PM and PM10 are defined and measured. PM by definition includes only filterable particulate matter that will be collected in a Method 5 (or equivalent) sampling train which does not measure condensible particulate. These condensible emissions exist as a gas or fume at elevated stack gas temperatures (usually >250°F) and condense, forming a particle after they are released to the atmosphere. USEPA considers condensible particulate matter to be PM10 and includes both the filterable and condensible fractions in determining the PM10 emission rate. This approach can cause the PM10 emission rate to exceed the PM rate, especially at sources with control devices that effectively capture particulate emissions larger than 10 microns but fail to provide adequate control of condensible emissions.

The following table shows the emissions the source has reported over the past several years.

Year	CO (tons/yr)	NO ₂ (tons/yr)	lead (tons/yr)	PM10 (tons/yr)	SO ₂ (tons/yr)	VOC (tons/yr)
1999	5,988	5	2.11	282	38	255
1998	3,945	3	1.39	73	25	164
1997	5,300	4	1.86	86	34	215
1996	5,300	4	1.86	86	34	215
1995	602	5	2.12	235	38	243
1994	276	60	2.78	224	52	121
1993	275	47	2.78	178	28	125

Comment #4

The table of emission calculations for the cupola in Appendix A lists a potential to emit of 48 tons per year of lead. I request that the actual emissions of lead be included in the table of actual emissions on page 7 of the technical support document. I also note there are no permits restrictions in terms of lead emissions, and no requirements for monitoring the plant's emissions controls.

Response #4

The table above shows actual emissions of lead from the facility for the past few years. Most of the lead

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is expected to be emitted at the cupola. Since the cupola was constructed prior to 1977 and has not been modified since then, there are no rules applicable to the cupola which directly limit lead emissions. However, the cupola is subject to the requirements of 326 IAC 6-3-2 (Process Operations), which is a State rule that limits particulate emissions from the cupola. By limiting particulate matter emissions, the rule indirectly limits lead emissions as well, since lead is also particulate matter. The permit does include requirements to monitor the baghouse which controls the particulate matter emissions from the cupola. The permit also includes requirements for the source to monitor the other particulate matter control devices controlling emissions from the other particulate-emitting facilities at the plant. These monitoring conditions require the source to observe whether visible emissions from the control devices are normal or abnormal, check the pressure drop across the baghouses, and perform inspections of the control devices. The permit requires corrective actions to be taken whenever an abnormal reading is observed.

Comment #5

The enforcement issues section on page 6 of the technical support document describes an Agreed Order with IDEM in 1988 for alleged violations of 326 IAC 6-4. Another Agreed Order with IDEM for alleged violations of 326 IAC 6-4 was entered on December 10, 1997 (cause no. A-4007) but is not included in this section. I request that this second Agreed Order be added to the Enforcement Issues section of the technical support document.

Response #5

There are no changes to the technical support document after public notice. However, the correction is noted here in the addendum. Golden Casting did enter into another Agreed Order with IDEM on December 10, 1997 for alleged fugitive dust violations.

Comment #6

There are times when I can smell the odor from the foundry even at my home, which is 1.5 miles from the foundry. When I smell that odor, I wonder to what it is I'm being exposed? I would like to get some information as to what these chemical emissions are that are associated with that odor.

Response #6

No detailed description of the odor was provided; therefore IDEM cannot determine which chemicals would cause the odor in question; however the following table shows Golden Castings' actual emissions of hazardous air pollutants in 1999. This information is based on the TRI report, which can be found at http://www.state.in.us/idem/oppta/tri/search.html.

Pollutant	Emissions (pounds)
phenol	0
manganese	5
nickel	5
chromium	5
copper	5
Total	20

In addition to what the source reported, IDEM has determined the following chemicals are likely to be emitted from the facility in very small amounts, as shown in the table below. One or more of these chemicals could be causing an odor from the facility.

Pollutant	Potential Uncontrolled Emissions (tons/year)	Potential Emissions After Controls (tons/year)
benzene	0.126	0.019
formaldehyde	0.003	0.000
xylene	0.043	0.007
toluene	0.051	0.008
hydrogen cyanide	0.00012	0.00012
aromatic amines	0.00002	0.00002
C ₂ to C ₅ aldehydes	0.00006	0.00006

Ms. Linda Donaldson provided comments during the public hearing on March 27, 2001. A summary of the comments is as follows:

Comment #7

I don't believe that the foundry is in compliance with the emission limitations at night. It seems like at night, they run things wide open and do not measure emissions. The odor is terrible at night and early morning. Some people I work with have asthma and the foundry emissions make them sick. They choke a lot more and their eyes water. You can talk about the rules and the laws, but just morally, I think it's reprehensible that Golden Casting pollutes this community like they do.

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Response #7

IDEM has included compliance monitoring requirements in the permit that are designed to ensure that continuous compliance is achieved. The permit requires the emission control devices to be operated at all times the emission units are in operation. The permit also includes some monitoring provisions, such as checking the pressure drops across baghouses, which are required to be done at night, as well as during the day.

Ms. Jean Terpstra provided comments during the public hearing on March 27, 2001. A summary of the comments is as follows:

Comment #8

One of the things I think there is a lot of confusion about is how Golden Casting can have such gross violation on such a regular basis, and how I can go outside my home, almost two miles away from the plant, and smell incredible fumes at night. They are doing this at night. I don't smell any odors from the foundry during the day.

Response #8

IDEM has no current enforcement actions pending against Golden Casting. IDEM has included compliance monitoring requirements in the permit that are designed to ensure that continuous compliance is achieved. The permit requires the emission control devices to be operated at all times the emission units are in operation. The permit also includes some monitoring provisions, such as checking the pressure drops across baghouses, which are required to be done at night, as well as during the day.

Odors from the foundry are likely to be stronger at night due to a condition called inversion. Inversion does not allow adequate mixing conditions in the atmosphere, which can cause emissions to be trapped near the ground. More emissions trapped near the ground can cause increased odors. Inversion tends to occur more often at night and during poor weather conditions, because the lack of heat from the sun tends to stabilize the inversion.

Comment #9

IDEM measures PM10 emissions from the foundry. PM10 is for the tiny particles that get deeply imbedded in your lungs and cause cancer, immune system [problems], and asthma. However, what people are complaining about are the larger particulate matter emissions. People are concerned about the particles that are large enough to be seen. Are those being monitored? Is this what you call fugitive dust? Is IDEM doing any measurements to determine if fugitive dust emissions at night are exceeding the allowable 50 micrograms per cubic meter? If not, I think the permit should require one, especially given the community's concern and the complaints that have been going on for several years now.

Response #9

PM10 emissions are the particles which are less than 10 microns in diameter. Larger particles are referred to as PM emissions. PM emitted from a facility is sometimes exhausted through a stack and sometimes exhausts directly to the atmosphere. PM that cannot reasonably be collected and exhausted through a stack is referred to as fugitive dust. The permit regulates both PM emissions exhausted from stacks and fugitive PM emissions. The PM emissions exhausted from stacks can be directly measured through stack testing. For many of the facilities, the permit requires such stack testing. The fugitive emissions are regulated by Condition C.5 which requires that fugitive dust cannot be visibly escaping beyond the property line. Additionally, at IDEM's request, the source has recently implemented a fugitive

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dust control plan. The plan outlines procedures the source will use to reduce fugitive dust emissions, such as using chemical dust suppressants on roads, sweeping and watering paved roads, covering some conveyors, using tarps on trucks, and storing baghouse dust in leak free containers. Since Golden Casting Corporation's implementation of the fugitive dust plan, IDEM has not observed any violations of the fugitive dust rules at the plant, nor has IDEM received any complaints from citizens about fugitive dust problems at the plant.

Comment #10

It sounds like there is no limit on how much lead this cupola furnace can put into our air. I find that extremely distressing, especially when we talk about the particulate matter landing on our homes and cars. There are small children in this community. Lead is highly dangerous, which everyone has known for about 25 years now.

Response #10

The table on page 3 of this document shows actual emissions of lead from the facility for the past few years. Most of the lead is expected to be emitted at the cupola. Since the cupola was constructed prior to 1977 and has not been modified since then, there are no rules applicable to the cupola which directly limit lead emissions. However, the cupola is subject to the requirements of 326 IAC 6-3-2 (Process Operations), which is a State rule that limits particulate emissions from the cupola. By limiting particulate matter emissions, the rule indirectly limits lead emissions as well, since lead is also particulate matter.

Comment #11

This grandfathering was back in 1968 and that's 34 years ago. You can't tell me that this cupola furnace, running somewhere between 22 and 27 tons per hour of metal through it, is not fully new by now. I'm sure every part has been replaced. There should be something in the permit stating that each year they must submit their maintenance schedule to show you what's been done and what parts have been replaced.

Response #11

The source is required to implement a Preventive Maintenance Plan for the cupola, and keep records of all Preventive Maintenance completed on the cupola. See Conditions B.12 and D.2.3 of the final permit. During IDEM inspections, the inspector can review these records to determine if any work done on the cupola actually constituted a modification, rather than just routine maintenance work.

Comment #12

I did notice that there seems to be a difference between condensible PM10 versus filterable total PM10 and this is the particulate matter. What is that? I would like you to explain what they are and why they are measured differently.

Response #12

Filterable refers to particulate that is in solid form and can be captured by a fiber filter, such as a baghouse. PM10 emissions are the particles which are less than 10 microns in diameter. These particles can consist of both filterable and condensible emissions. Condensible emissions consist of tiny particles which exit the stack in gaseous form. Once these particles cool, they condense out as PM10 emissions. Also, see response to comment #5.

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Comment #13

What is measured by the monitor in Columbus? Does it measure the emissions from the entire community, or only from the foundry? Does it measure the particulate that's visible, or only the tiny particulate (PM10)?

Response #13

In August 2000, in an effort to determine if a health problem or threat from respirable particulate matter existed in the area around Golden Casting, IDEM located a PM10 monitor near the facility. Monitors are used to determine the quality of the air (in the community or region) as compared to the National Ambient Air Quality Standards (NAAQS) which are established by EPA. The NAAQS establish minimum air quality standards to protect human health. The monitor in Columbus is designed to measure the PM10 concentration in the ambient air very near the foundry.

Other methods are used to determine if the emissions from one particular stack or company are in violation or causing a problem with air quality. Stack testing is the method used by IDEM to determine whether the emissions from a single stack are in violation of a rule.

Mr. Elbert Held, Ms. Marcia Prior and Ms. Maria Bulthuis all provided similar comments during the public hearing on March 27, 2001. A summary of the comments is as follows:

Comment #14

I have soot on top of my car, on my walls, on my furniture, inside my cabinets, on my curtains, on my china inside my china cabinet, and all over the outside of my house. I have nice things and I'd like to keep them that way. I'd like to see this dust problem cleared up. It's making people sick. Ms. Bulthuis states that her kids have headaches often and can hardly breathe, due to the emissions from the foundry.

Response #14

The National Ambient Air Quality Standards (NAAQS) establish minimum air quality standards to protect human health. The PM10 monitor in Columbus measured PM10 concentrations well below the NAAQS which are established by EPA. The concentrations of particulate matter measured in the air at this location in Columbus were compared to both the short term (24-hour) and long term (annual) NAAQS. To attain the short-term standard, the levels must be below 150 ug/m³. The highest daily average recorded in Columbus was 75 ug/m³, one-half of the standard. To attain the long term (annual) standard, the levels must be below 50 ug/m³. Quarterly averages of the data collected showed an average of 25.9 ug/m³. Averaging all the values for the entire period produced an average of 25.2 ug/m³. Regardless of which method is used to calculate the average, the value is approximately one-half of the long term standard.

This permit includes many new monitoring and testing requirements to ensure that particulate matter emissions are in continuous compliance with air quality rules. This new permit requires the source to monitor all of the particulate matter control devices each shift (including night shifts). If an abnormal situation is observed, the permit requires the source to take corrective actions to fix the problem. The permit also requires stack testing for many facilities which the source has never tested, or has not tested for several years.

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Ms. Josephine F. Thompson submitted written comments on the proposed permit during the public comment period. A summary of the comments is as follows:

Comment #15

The smoke, fumes, and sandy grit from the foundry have caused me a great deal of misery for many years. It is hard on the siding and window sills of my house and has ruined the paint on my car. They have said that the emissions are within the allowable levels; however, I don't believe that the foundry operates in compliance. I am fighting sinus, allergy, and cancer and not getting any better. I hope it improves in the near future.

Response #15

The PM10 monitor in Columbus measured PM10 concentrations well below the National Ambient Air Quality Standards (NAAQs) which are established by EPA. The NAAQS establish minimum air quality standards to protect human health.

This permit includes many new monitoring and testing requirements to ensure that particulate matter emissions are in continuous compliance with air quality rules. This new permit requires the source to monitor all of the particulate matter control devices each shift (including night shifts). If an abnormal situation is observed, the permit requires the source to take corrective actions to fix the problem. The permit also requires stack testing for many facilities which the source has never tested, or has not tested for several years.

Mr. Brian Kuznicki submitted written comments on the proposed permit during the public comment period. Many of Mr. Kuznicki's comments were regarding damages to his house and car, caused by the emissions from Golden Casting. These types of comments have already been addressed previously in this document (see responses #14 and 15). A summary of the comments not already addressed is as follows:

Comment #16

(comment dated November 5, 2000)

According to a newspaper article in The Republic in Columbus, Indiana, Golden Casting is well within the limits of PM10 emissions over the past 39 days. I would like to know if any other emissions are being tested.

Response #16

The only monitor in Columbus is the one measuring PM10 concentrations. For more complete information regarding the PM10 data collected by the monitor, please refer to responses to comments #13 and 14. In order to measure emissions of other types of pollutants, Golden Castings is required to conduct a stack test for VOC emissions from their coremaking processes within 180 days after issuance of this permit.

On November 22, 2000, Mr. Thomas K. Smith, Golden Castings Corporation, provided written comments on the proposed permit. A summary of the comments is as follows:

Comment #1

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We have eliminated some of the core making operations at our facility and have reviewed the descriptions contained in the draft permit. Paragraph A.2(q) and the descriptions of equipment under D.5 should be amended to read as follows to reflect the equipment currently in operation at our facility:

- (q) Core making operations consisting of the following:
 - (1) Eight (8) Four (4) 4-103 Isocure core machines, identified as 201, constructed in 1972 1976 with a maximum capacity of 8 6 tons of cores per hour total with emissions controlled by a scrubber, SB-2, exhausting through stack SB-2.

 These core machines are supplied by the B&P mixer.
 - One (1) **4-101** Cold Box core machine, identified as 202, constructed in 1986 with a maximum capacity of 1 ton of cores per hour with emissions controlled by a scrubber, SB-3 **SB-2**, exhausting through stack SB-3 **SB-2**. **This core** machine is supplied by the **B&P** mixer.
 - (3) Six (6) One (1) 315 D Cold Box core machines, identified as 203, constructed in 1986 with a maximum capacity of 6 1 tons of cores per hour total with emissions controlled by a scrubber, SB-4, exhausting through stack SB-4. This core machine uses a manual mixer.
 - (4) Two (2) **EB-2** Cold Box core machines, identified as 204, constructed in 1993 with a maximum capacity of 2 tons of cores per hour total with emissions controlled by a scrubber, SB-4 **SB-2**, exhausting through stack SB-4 **SB-2**. **These core machines are supplied by the B&P mixer.**
 - (5) One (1) 4-102 Isocure core machine, identified as 205, constructed prior to 1977 with a maximum capacity of 1 ton of cores per hour with emissions controlled by a scrubber, SB-4, exhausting through stack SB-4. This core machine uses a manual mixer.
 - (6) One (1) 4-103 Isocure core machine, identified as 206, constructed prior to 1977 with a maximum capacity of 1.5 ton of cores per hour with emissions controlled by a scrubber, SB-3, exhausting through stack SB-3. This core machine is supplied by an auger mixer.
 - (5)(7) Three (3) One (1) Insta Draw Isocure core machines, identified as 205, 206, and 207, constructed prior to 1977 with a maximum capacity of 3 tons 1 ton of cores per hour with emissions controlled by a scrubber, SB-5, exhausting through stack SB-5.
 - (6)(8) One (1) Pepset core system, identified as 208, constructed prior to 1977 1970 with a maximum capacity of 2 tons of cores per hour with emissions uncontrolled exhausting through stack SU-14.
 - (7)(9) One (1) Airset core system, identified as 209, constructed prior to 1977 with a maximum capacity of 2 tons of cores per hour with emissions uncontrolled exhausting through stack SU-15.
 - (8)(10) One (1) Sutter core machine, identified as 210, constructed before 1977 with a maximum capacity of 1 tons of cores per hour with emissions uncontrolled

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exhausting internally through stacks SU-12 and SU-13.

- (9)(11) Two (2) Three (3) Demler core machines, all three identified as 211 and 212, constructed before 1977 with a maximum capacity of 2 tons of cores per hour total with emissions uncontrolled exhausting internally through stacks SU-12 and SU-13.
- (10)(12) One (1) Three (3) Shalco core machines, identified as 213, constructed before 1977 with a maximum capacity of 1 ton of cores per hour with emissions uncontrolled exhausting internally through stacks SU-12 and SU-13.
- (11)(13) One (1) core machine, identified as 214, constructed before 1977 with a maximum capacity of 1 ton of cores per hour with emissions uncontrolled exhausting internally through stacks SU-12 and SU-13.
- (12)(14) One (1) Two (2) MC5 core machines, identified as 215, constructed before 1977 with a maximum capacity of 1 ton of cores per hour with emissions uncontrolled exhausting internally through stacks SU-12 and SU-13.
- One (1) Shell core machine, identified as 216, constructed before 1977 with a maximum capacity of 1 ton of cores per hour with emissions uncontrolled exhausting **internally** through stacks SU-12 and SU-13.
- (14)(16) Two (2) Isocure core machines and sand handling system, identified as 200, constructed in 1997 and 1998 with a maximum capacity of 12.3 tons of cores per hour with emissions controlled by an acid scrubber, SB-1, for VOC control and a cartridge filter for particulate control exhausting through stack SB-1.
- One (1) core sand handling system, constructed in 1997 with a maximum capacity of 123 tons of sand per hour with particulate emissions controlled by a cartridge filter and exhausting through stack SB-1.

Response #1

The corrections have been made. Since the number of core machines, capacities, and dates of construction have changed, the emission calculations have been revised accordingly. The revised calculations are shown in Appendix A.

Comment #2

Condition C.17, Compliance Monitoring and Response Plan - Failure to Take Response Steps. We do not believe that 40 CFR Part 70, or 326 IAC 2-7 provides any authority to require the preparation of a Compliance Response Plan (CRP) or to establish the basis for a violation of the permit for failure to conduct the identified response steps. Rather, the regulation requires only that applicable monitoring requirements and test methods be spelled out in the plan. It does not require the preparation of a compliance plan that itself becomes a set of enforceable conditions. Failure to take specific response steps should not be interpreted in any way as evidence of non-compliance with an underlying applicable requirement, which is implied by this permit condition, nor should it be considered a violation of the permit itself. We would request that all references to a Compliance Response Plan be eliminated from this condition. Alternately, the Compliance Response Plan should be regarded in the same way as the Preventive maintenance Plan (i.e., failure to implement elements of the plan should not be deemed a

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violation unless tied to an applicable rule or limit, or unless such failure has caused or contributed to a reportable deviation. This should be reflected in Condition B.16 (b) on deviation reporting. With Respect to paragraph C.17 (e), Golden requests clarification of the meaning of the phrase "in operation." There are times that the equipment may be in an idling mode during which the processing is not actively occurring. Golden believes that periods of idling should not be considered as to be "in operation". This would enable Golden to conduct maintenance on control equipment during periods of process equipment idling. Please modify this section as follows:

All monitoring required in Section D shall be performed at all times the equipment is operating., where "operating" is defined as any time that pollutants are being emitted from the emission unit before controls. If monitoring is required by Section D and the equipment is not operating, as defined above, then the Permittee may perform the required monitoring, record the fact that the equipment is not operating or indicate that the equipment is undergoing maintenance procedures or perform the required monitoring.

Response #2

IDEM has worked with members of the Clean Air Act Advisory Council's Permit Committee, Indiana Manufacturing Association, Indiana Chamber of Commerce and individual applicants regarding the Preventive Maintenance Plan, the Compliance Monitoring Plan and the Compliance Response Plan. The plans are fully supported by rules promulgated by the Air Pollution Control Board. The plans are the mechanism each Permittee will use to verify continuous compliance with its permit and the applicable rules and will form the basis for each Permittee's Annual Compliance Certification. Each Permittee's ability to verify continuous compliance with its air pollution control requirements is a central goal of the Title V and FESOP permit programs.

The regulatory authority for and the essential elements of a compliance monitoring plan were clarified in IDEM's Compliance Monitoring Guidance, in May 1996. IDEM originally placed all the preventive maintenance requirements in the permit section titled "Preventive Maintenance Plan." Under that section the Permittee's Preventive Maintenance Plan (PMP) had to set out requirements for the inspection and maintenance of equipment both on a routine basis and in response to monitoring. Routine maintenance was a set schedule of inspections and maintenance of the equipment. The second was inspection and maintenance in response to monitoring that showed that the equipment was not operating in its normal range. This monitoring would indicate that maintenance was required to prevent the exceedance of an emission limit or other permit requirement.

The maintenance plan was to set out the "corrective actions" that the Permittee would take in the event an inspection indicated an "out of specification situation", and also set out the time frame for taking the corrective action. In addition, the PMP had to include a schedule for devising additional corrective actions for out of compliance situations that the source had not predicted in the PMP. All these plans, actions and schedules were part of the Preventive Maintenance Plan, with the purpose of maintaining the Permittee's equipment so that an exceedance of an emission limit or violation of other permit requirements could be prevented.

After issuing the first draft Title V permits on public notice in July of 1997, IDEM received comments from members of the regulated community regarding many of the draft permit terms, including the PMP requirements. One suggestion was that the corrective action and related schedule requirements be removed from the PMP requirement and placed into some other requirement in the permit. This suggestion was based, in some part, on the desire that a Permittee's maintenance staff handle the routine maintenance of the equipment, and a Permittee's environmental compliance and engineering staff handle the compliance monitoring and steps taken in reaction to an indication that the facility required maintenance to prevent an environmental problem.

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IDEM carefully considered this suggestion and agreed to separate the "corrective actions" and related schedule requirements from the PMP. These requirements were placed into a separate requirement, which IDEM named the Compliance Response Plan (CRP). In response to another comment, IDEM changed the name of the "corrective actions" to "response steps." That is how the present CRP requirements became separated from the PMP requirement, and acquired their distinctive nomenclature.

The Compliance Monitoring Plan is made up of the PMP, the CRP, the compliance monitoring and compliance determination requirements in section D of the permit, and the record keeping and reporting requirements in sections C and D. The section D provisions set out which facilities must comply with the CRP requirement. The authority for the CRP provisions is found at 326 IAC 2-7-5(1), 2-7-5(3), 2-7-5(13), 2-7-6(1), 1-6-3 and 1-6-5.

IDEM does not agree with the Permittee's suggestion that "in operation" does not include times when the equipment is idling. There have been no changes to the permit as a result of this comment.

Comment #3

Condition D.2.5 Testing Requirements. The Cupola was tested in 1997/98 and showed compliance. In light of this testing, we would request that the compliance test required by this condition be required to take place within 24 months of the date of issuance, rather than within 180 days. We would also request that the compliance tests be required once every five years rather than every 2 ½ years, because the compliance and inspection conditions applicable to the Cupola are more than sufficient to ensure continuous compliance and proper operation of the control equipment.

Response #3

IDEM requires stack testing for cupolas once every 2.5 years. This frequency is determined based on the nature of the process and the potential emissions. Since the cupola has not been tested within the past 2.5 years, the first stack test is required to be performed within 180 days after permit issuance. The other compliance monitoring conditions related to the cupola and its controls are not <u>alone</u> sufficient to determine continuous compliance with the emission limits in the permit. IDEM believes that periodic stack testing is also necessary to ensure compliance with the emission limits. There have been no changes to the permit as a result of this comment.

Comment #4

Condition D.6.2, Particulate Matter. This condition includes additional PM emission limitations not included in the original construction permit for this emission unit. We would request that the lb/hour and ton/year PM and PM10 limits be removed from the permit. As shown in the Technical Support Document for the construction permit, the Potential to Emit is only 0.77 lbs/hour and 3.38 tons/year at 0.03 gr/scf and 3,000 scfm.

Response #4

The limit of 0.03 grains per dry standard cubic foot of exhaust air is pursuant to CP005-7081 issued on March 12, 1997. However, that limit alone is not sufficient to render the requirements of 326 IAC 2-2 (PSD) not applicable. For the outlet grain loading limit to be sufficient to render PSD not applicable, a separate federally enforceable limit on airflow would also be necessary. IDEM chooses not to limit airflow, and instead limit outlet emissions in pounds per hour. These limits are necessary to render PSD not applicable. There have been no changes to the permit as a result of this comment.

Comment #5

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Condition D.6.5, Testing Conditions. We have already performed initial performance tests on the Loramendi acid gas scubber as required by the construction permit for the facility. This testing showed compliance with the allowable limits. We would request that 24 months be allowed to perform a follow up test, and that repeat testing be required every 5 years, instead of every 2 ½ years.

The control device for the sand system is not a cartridge filter, but actually just a bin vent. Unlike a baghouse, there is no fan drawing air through the vent. We also request that the requirement to test the sand system be deleted from the permit. The construction permit for this core production area did not require compliance testing and we do not believe that compliance testing is warranted on this system given the relatively low exhaust flow rates and expected emission levels as described above. The monitoring requirements in the construction permit and the Title V permit are adequate to ensure that emissions are well below the PSD significance thresholds.

Response #5

The core machines are subject to 326 IAC 2-2 (PSD) and must comply with BACT limits for VOC emissions. IDEM requires stack testing for core making processes of this magnitude once every 2.5 years. Since the core making process has not been tested within the past 2.5 years, the first stack test is required to be performed within 180 days after permit issuance. The other compliance monitoring conditions related to the core making process and its controls are not alone sufficient to determine continuous compliance with the emission limits in the permit. IDEM believes that periodic stack testing is also necessary to ensure compliance with the emission limits.

After the stack test for the core machines that is required to be conducted within 180 days after issuance of this permit, the Permittee may petition IDEM to skip the second test during the same permit term. At that time IDEM would consider such a request to allow the source to skip a test. IDEM will review the results of previous stack tests, compliance monitoring, the compliance history of the source, and other related factors in order to decide whether to allow the source to skip a test.

IDEM agrees that a stack test is not necessary for the bin vent controlling the sand system. Condition D.6.5 has been revised such that the PM and PM10 testing is no longer required.

D.6.5 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Within 180 days after issuance of this permit, the Permittee shall perform VOC testing on the scrubber SB-1 controlling the core machines, and PM and PM10 testing on the core sand handling system, using methods as approved by the Commissioner, in order to demonstrate compliance with Condition D.6.1, D.6.2, and D.6.3. The PM and PM10 tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. The VOC tests shall be repeated at least once every two and one-half (2.5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

Comment #6

Conditions D.2.7, D.3.6, D.4.7, D.6.10, Visible Emissions Notations. We would request that the frequency of recording visible emissions notations be reduced to once per day. We will not always be able to record visible emission notations every shift due to the fact that some shifts occur during non-daylight hours during the winter months.

Response #6

Compliance monitoring conditions such as this requirement to perform visible emission notations, are

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require in order to demonstrate continuous compliance with the permit requirements. Visible emission notations are used to indicate compliance with 326 IAC 5-1, 326 IAC 6-3-2 and for some units, the PM limitations required to render 326 IAC 2-2 (PSD) not applicable. Since bag failure can occur suddenly and without warning, possibly causing a violation of 326 IAC 5-1 or 326 IAC 6-3-2, the OAQ does not believe that daily notations would be sufficient for the Permittee to demonstrate continuous compliance. Once per shift visible emission notations are reasonable and necessary in order to demonstrate continuous compliance. The condition already states that visible emissions shall be performed once per shift during normal daylight operations. There has been no change to the permit as a result of this comment.

Comment #7

Conditions D.2.8, D.3.8, D.4.8, D.5.5, D.6.7 D.6.11 Parametric Monitoring. We would request that the frequency of recording notations for the parametric monitoring be reduced to once per day. We believe that this is adequate to ensure continuous compliance. We would also note that this frequency is consistent with the frequency required by the construction permit for the Loramendi complex as it relates to the acid scrubber.

Also, the pressure drops described in the permit are not accurate and should be changed as follows:

- The pressure drop for BH-3 should be 5 to 12 inches of water (Condition D.2.7).
- The pressure drop for BH-1, BH-12, and BH-13 should be 5 to 12 inches of water (Condition D.3.7).
- The pressure drop for BH-10 should be 4 to 11 inches of water (Condition D.4.8).

Response #7

Compliance monitoring conditions such as this requirement to keep pressure drop records, are required in order to demonstrate continuous compliance with the permit requirements. Parametric monitoring requirements are used to indicate compliance with 326 IAC 6-3-2 and the PM limitations required to render 326 IAC 2-2 (PSD) not applicable. Since bag failure can occur suddenly and without warning, possibly causing a violation of 326 IAC 6-3-2, the OAQ does not believe that daily checks would be sufficient for the Permittee to demonstrate continuous compliance. Once per shift monitoring of pressure drop is reasonable and necessary in order to demonstrate continuous compliance. There has been no change to the frequency of the parametric monitoring requirements as a result of this comment.

The normal pressure drop ranges of the baghouses have been changed as requested.

Comment #8

Conditions D.2.9, D.3.9, D.4.9, D.6.12, Baghouse Inspections. We would request that this condition be eliminated, since the intent of this condition is already covered by other conditions, which may in fact conflict with this condition. Baghouse inspections should more appropriately be included under our Preventive Maintenance Plan, rather than be addressed as a specific permit condition. Again, if there is a specific applicable requirement for such inspections beyond the requirement for a Preventive Maintenance Plan, we would like to know the reference for such a requirement. In any event any necessary inspection conditions can and should be worked out in the context of the Preventive Maintenance Plan

Response #8

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM the authority to require compliance monitoring conditions as necessary to assure continuous compliance with the emission limits. These baghouses

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must operate properly in order for these processes to achieve compliance; therefore, IDEM believes it is reasonable and necessary to require the source to inspect the baghouses periodically. There has been no change to the permit as a result of this comment.

Comment #9

Conditions D.2.10, D.3.9, D.4.9, D.5.7, Broken or Failed Bag Detection, and Scrubber Failure Detection. We would request that this condition be eliminated, since the intent of this condition is already covered by other conditions, which may in fact conflict with these conditions. The Emergency Provisions in Condition B.12 address situations such as the failure of control equipment. The requirements of this condition do not appear to be based on a specific applicable requirement and may in fact conflict with the requirements of Condition B.12 (Emergency Provisions). Further, the appropriate response to these situations will be spelled out in the Preventive Maintenance Plan, and do not require separate permit conditions. Such an approach is consistent with the way the baghouse inspections are handled in other permits.

Response #9

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM the authority to require compliance monitoring conditions as necessary to assure continuous compliance with the emission limits. These baghouses and scrubbers must operate properly in order for these processes to achieve compliance; therefore, IDEM believes it is reasonable and necessary to require the source to shutdown the processes whenever the associated control device fails. The condition states that operations may continue if the event qualifies as an emergency; therefore it does not conflict with condition B.12 (Emergency Provisions). There has been no change to the permit as a result of this comment.

Comment #10

Conditions D.5.1, D.5.2, D.5.3, D.5.4, D.5.5, D.5.6, D.5.7, D.5.8, and D.5.9, Related to Cold Box Core machines 202, 203, and 204. These three cold box core machines are operated at relatively low levels, and while we do have scrubbers to reduce the Triethylamine (TEA) emission levels, we have determined that we will emit less than 25 tons of VOCs per year even without the use of the scrubbers. We would therefore request that these conditions be amended to limit pre-control emissions from emission units 202 and 203 combined to less than 25 tons per year, and from emission unit 204 to less than 25 tons/year. Accordingly, the annual TEA and resin usages should be those sufficient to limit uncontrolled VOC emissions to less than 25 tons/year). Since controls would not be required, we would request that

- ·Condition D.5.3 be amended to not require testing of the scrubber,
- ·Condition D.5.4 regarding operation of the scrubbers be deleted,
- ·Condition D.5.5 regarding parametric monitoring be deleted,
- · Condition D.5.6 regarding scrubber inspections be deleted,
- · Condition D.5.7 regarding failure detection be deleted,
- ·Condition D.5.8 regarding record keeping requirements be amended by deleting paragraphs a & b,

Response #10

IDEM has calculated the production levels necessary to limit uncontrolled emissions to less than the applicability levels of 326 IAC 8-1-6 (BACT). See Appendix A for detailed calculations. IDEM determined that they are 15,563 tons of cores per year for core machines 202 and 203 combined and 15,563 tons of cores per year for core machines 204. A core production limit of 15,563 tons per year is equivalent to 31,125 pounds of TEA per year and 373,500 pounds of resin per year, assuming a maximum of one and two-tenths percent (1.2%) resin usage. The following changes have been made to Conditions in Section D.5 of the permit. Appropriate reporting forms have also been added to the

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permit.

D.5.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6] [326 IAC 2-2]

In order to render the requirements of 326 IAC 8-1-6 (BACT), 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable, the following conditions shall apply:

- The VOC emissions from the scrubber SB-3 controlling the cold box core machine constructed in 1986 (identified as emission unit 202), shall not exceed 2.74 pounds per hour. The resin usage for core machines 202 and 203 combined (seven machines total) shall not exceed 373,500 pounds per twelve consecutive month period. TEA usage for core machines 202 and 203 combined (seven machines total) shall not exceed 31,125 pounds per twelve consecutive month period.
- The sand throughput to the one (1) Cold box core machine constructed in 1986 (identified as emission unit 202) shall not exceed 68,571 tons per 12 consecutive month period. The resin usage for core machines 204 combined (two machines) shall not exceed 373,500 pounds per twelve consecutive month period. TEA usage for core machines 204 combined (two machines) shall not exceed 31,125 pounds per twelve consecutive month period.
- The VOC emissions (not including TEA) from each of the six (6) cold box core machines identified as emission units 202, 203, and 204 shall not exceed 2.74 pounds per hour (total for all six machines) 0.05 pounds per pound of resin.
- The VOC emissions from the two (2) cold box core machines identified as emission unit 204 shall not exceed 5.48 pounds per hour (total for both machines). The TEA emissions from each of the cold box core machines identified as emission units 202, 203, and 204 shall not exceed 2.0 pounds per ton of cores.
- The VOC emissions from the scrubber SB-4 controlling the cold box core machines
 (identified as emission unit 203 and 204), shall not exceed 5.48 pounds per hour (total for all eight machines).
- The sand throughput to the cold box core machines (identified as emission unit 203 and 204) shall not exceed 205,713 tons per 12 consecutive month period for all machines total.

Therefore, the requirements of 326 IAC 8-1-6 (BACT) shall not apply. Compliance with above limits will also render the requirements of 326 IAC 2-2 and 40 CFR 52.21 not applicable.

D.5.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the scrubbers.

Compliance Determination Requirements

D.5.3 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Within 180 days after issuance of this permit, the Permittee shall perform VOC testing on the scrubbers SB-3 and SB-4 controlling the core machines identified as 200, 202, 203, and 204, using methods as approved by the Commissioner, in order to demonstrate compliance with Condition D.5.1 (a) and (c). These tests shall be repeated at least once every five (5) years from

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the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.5.4 Volatile Organic Compounds (VOC) Controls

The scrubbers shall be in operation at all times when any of the associated core machines are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.5.5 Parametric Monitoring

The Permittee shall monitor and record the acid content, pressure drop, and flow rate of each of the scrubbers, at least once per shift when the associated core machines are in operation when venting to the atmosphere. When for any one reading the pressure drop across one of the scrubbers is outside of the normal range of 1.0 and 4.0 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. When for any one reading the flow rate of one of the scrubbers is less than 50 gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports. When for any one reading, the acid content of one of the scrubbers is below a pH level of 2, or an acid content established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C -Compliance Response Plan - Preparation, Implementation, Records, and Reports. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading, or when the flow rate is below the above mentioned minimum level for any one reading, or the pH level is above the above mentioned maximum for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instruments used for determining the pressure, flow rate, and pH level shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.5.6 Scrubber Inspections

An inspection shall be performed each calender quarter of each of the scrubbers controlling the core machines when venting to the atmosphere. A scrubber inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors.

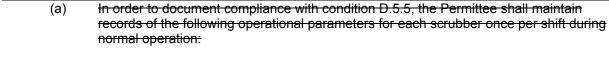
D.5.7 Failure Detection

In the event that a scrubber failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

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pressure drop;

• flow rate; and

acid content (pH level).

- (b) In order to document compliance with Condition D.5.6, the Permittee shall maintain records of the results of the inspections required under Condition D.5.6 and the dates the vents are redirected.
- (c) In order to document compliance with Conditions D.5.1 (a) and (b) and (d), the Permittee shall maintain records of the amount of sand throughput TEA and resin usage for each of the core machines identified as 202, 203, and 204.
 - (d)(b) To document compliance with Condition D.5.1 (c), the Permittee shall maintain records of the VOC content of the binders used for all of the Isocure core machines each month.
 - (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.5.9**D.5.3** Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.5.1 (b)(a) and (d) (b) shall be submitted to the address in Section C - General Reporting Requirements, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

On January 23, 2002, Mr. Tom Rarick, Keramida Environmental, on behalf of Golden Castings Corporation, provided comments on the proposed permit. A summary of the comments is as follows:

Comment #1

Please list the responsible official as the "President" of the company instead of Thomas K. Smith.

Response #1

The requested change has been made.

Comment #2

The maximum capacity of the Stationmaster mold line should be listed as 7 tons of metal per hour and 40 tons of sand per hour instead of 2 tons of metal per hour and 11 tons of sand per hour. The maximum capacity of the Stationmaster sand system should be 40 tons of sand per hour instead of 11 tons of sand per hour. No physical modifications have occurred. Golden simply erred in listing the correct maximum capacities when completing the Part 70 application.

Response #2

The corrections have been made to the Part 70 permit. The descriptions of the units in Sections A.2 and D.3 have been revised appropriately. The calculations have also been revised accordingly and the allowable emissions pursuant to 326 IAC 6-3-2 (Process Operations) have been revised accordingly.

- (g) Stationmaster pouring process, identified as 342, constructed before 1977 with a maximum capacity of 2 7 tons of metal per hour and 11 40 tons of sand per hour with emissions uncontrolled and exhausting internally.
- (h) Stationmaster cooling process, identified as 343, constructed before 1977 with a maximum capacity of **2 7** tons of metal per hour and **11 40** tons of sand per hour with emissions uncontrolled and exhausting internally.
- (i) Stationmaster casting shakeout process, identified as 344, constructed in 1994 with a maximum capacity of 2 7 tons of metal per hour and 41 40 tons of sand per hour with emissions controlled by one (1) baghouse, BH-15, exhausting through stack SC-12.
- (j) Stationmaster sand system and muller, identified as 341, constructed before 1977 with a maximum capacity of 41 40 tons of sand per hour with emissions controlled by one (1) baghouse, BH-15, exhausting through stack SC-12.

D.3.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the following conditions shall apply:

- (e) The particulate matter (PM) from the Stationmaster pouring/casting process shall not exceed 22.9 **44.0** pounds per hour when operating at a process weight rate of 13 **47** tons of metal castings and sand molds and cores per hour.
- (f) The particulate matter (PM) from the Stationmaster casting cooling process shall not exceed 22.9 **44.0** pounds per hour when operating at a process weight rate of 13 **47** tons of metal castings and sand molds and cores per hour.
- (g) The particulate matter (PM) from the baghouse BH15 controlling the Stationmaster shakeout and sand handling process shall not exceed 22.9 **44.0** pounds per hour when operating at a process weight rate of 13 **47** tons of metal castings and sand molds and cores per hour.

Comment #3

The Plant 1 Blast is commonly referred to as the BMD Blast; therefore, please change the unit description to state the BMD Blast.

Response #3

The requested change has been made.

Comment #4

The S. Tumble Blast is controlled by baghouse BH-6, not baghouse BH-9.

Response #4

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The requested change has been made. The descriptions of the unit have been changed in Sections A.2 and D.4 of the permit.

Section A.2

- (o) Shotblasting operations consisting of the following:
 - (4) S. Tumble Blast, identified as 443-3, constructed before 1968 with a maximum capacity of 7 tons of metal per hour with emissions controlled by a baghouse, BH-9 BH-6, exhausting through stack SC-19C.

Section D.4

- (a) Shotblasting operations consisting of the following:
 - (4) S. Tumble Blast, identified as 443-3, constructed before 1968 with a maximum capacity of 7 tons of metal per hour with emissions controlled by a baghouse, BH-9 BH-6, exhausting through stack SC-19C.

Comment #5

The maximum capacity of the 42 Blast is 18 tons of metal per hour, not 7 tons of metal per hour. No physical modifications have occurred. Golden simply erred in listing the correct maximum capacities when completing the Part 70 application.

Response #5

The corrections have been made to the Part 70 permit. The descriptions in Sections A.2 and D.4 have been changed appropriately. The calculations have also been revised accordingly and the allowable emissions pursuant to 326 IAC 6-3-2 (Process Operations) have been revised accordingly.

Section A.2

- (o) Shotblasting operations consisting of the following:
 - (5) 42 Blast, identified as 442, constructed before 1977 with a maximum capacity of **7 18** tons of metal per hour with emissions controlled by a baghouse, BH-14, exhausting through stack SC-18.

Section D.4

- (a) Shotblasting operations consisting of the following:
 - (5) 42 Blast, identified as 442, constructed before 1977 with a maximum capacity of **7 18** tons of metal per hour with emissions controlled by a baghouse, BH-14, exhausting through stack SC-18.

D.4.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the following conditions shall apply:

(f) The particulate matter (PM) from the baghouse BH-14 controlling the 42 Blast shotblast machine shall not exceed 15.1 28.4 pounds per hour when operating

at a process weight rate of **7 18** tons of metal castings per hour.

Comment #6

Condition D.4.5 of the Part 70 permit requires a stack test for PM and PM10 emissions for the Plant 1 450 Blast shotblast machine within 180 days after permit issuance. Golden Castings performed a stack test on the Plant 1 450 Blast shotblast machine in January 2001; therefore, Golden requests the permit require this test to be repeated within 5 years after the previous test, instead of within 180 days after permit issuance.

Response #6

The permit required a stack test within 180 days after startup of the shotblast machine. The test conducted in January 2001 showed compliance with the applicable PM and PM10 emission limits. IDEM agrees that a five year interval for stack testing is reasonable for shotblast machines. The requested change has been made.

D.4.5 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Within 180 days after startup Between June 2005 and January 2006, the Permittee shall perform PM and PM10 testing on the baghouse BH10 used to control the BMD 450 Blast shotblast machine using methods as approved by the Commissioner, in order to demonstrate compliance with Conditions D.4.1 and D.4.2. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

Comment #7

The core sand handling system is controlled by a bin vent, not a cartridge filter. Therefore, it is not practical to measure the pressure drop.

Response #7

IDEM agrees. The requirement to measure the pressure drop has been deleted. The description has been changed to indicate that emissions are controlled by a bin vent instead of a cartridge filter.

The following changes have been made to the descriptions in Sections A.2(q)(15) and D.6(b).

One (1) core sand handling system, constructed in 1997 with a maximum capacity of 123 tons of sand per hour with particulate emissions controlled by a cartridge bin vent filter and exhausting through stack SB-1.

The following condition has been deleted from Section D.6 of the permit.

D.6.11 Parametric Monitoring

The Permittee shall record the total static pressure drop across the cartridge filter used in conjunction with the core room sand handling system at least once per shift when the core room sand handling system is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the cartridge filter shall be maintained within the range of 2.0 - 9.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned

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range for any one reading. Failure to take response steps in accordance with Section C
- Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to
approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

Additionally, all other references to the cartridge filter have been changed to bin vent filter in Section D.6 of the permit.

Comment #8

Condition D.6.7 states "when for any one reading, the acid content of one of the scrubbers is below a pH level of 2, or an acid content established during the latest stack test...". Our most recent stack test established a pH level of 4.5.

Response #8

The most recent IDEM-approved stack test for these core machines was conducted on December 16, 1998. The test showed compliance with the VOC emission limits; however, during the test, the pH level never exceeded 1.18. IDEM believes that a pH level of less than 2 is appropriate for now, since the source has never demonstrated compliance with the VOC limit at a pH level greater than 2. The permit condition requiring the pH to be at or less than 2 may be amended at a later date if the source can demonstrate compliance with the VOC limit at a pH higher than 2.

Upon further review, the OAQ has decided to make the following changes to the permit.

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(1) The expiration date has been added to the signature box. The expiration date is exactly 5 years after the issuance date.

Operation Permit No.: T005-6001-00006	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: Expiration Date:

Section A

(1) The following rule cite has been added to A.1 (General Information). The rule cite includes the definition of a major source in 326 IAC 2-7. Also, in order to reduce the possibility for administrative amendments to the permit, IDEM is no longer going to include the phone number of the contact person.

Permit Reviewer: Nisha Sizemore

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A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary gray iron foundry, which is a secondary metal production facility.

Responsible Official: Thomas K. Smith President

Source Address: 1616 Tenth Street, Columbus, Indiana 47201 Mailing Address: 1616 Tenth Street, Columbus, Indiana 47201

Phone Number: 812-372-3701

SIC Code: 3321

County Location: Bartholomew County

Source Location Status: Attainment for all criteria pollutants

Source Status: Part 70 Permit Program

Major, under PSD

Major Source, Section 112 of the Clean Air Act

1 of 28 Source Categories

Section B

(1) Condition B.1 has been deleted because the referenced rule has been repealed. All subsequent conditions in Section B have been renumbered appropriately.

B.1 Permit No Defense [IC 13]

- (a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.
- (b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled "Permit Shield."
- (2) In Condition B.3, now renumbered B.2, (Permit Term), language has been added to clarify that amendments, revisions or modifications do not extend the expiration date of the permit. The expiration date will always be 5 years from the issuance date of the original permit. The expiration date will now be typed in the signature box as well. A new rule, 326 IAC 2-1.1-9.5, is now listed in the title of the condition

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the effective original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

(3) The condition B.8, now re-numbered B.7 (Duty to Supplement and Provide Information) has been reworded to match the language in the rule.

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B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]
- (c) Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit. The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. If requested by IDEM, OAQ, or the U.S. EPA, to When furnishing copies of requested records directly to U.S. EPA, then the Permittee must furnish record directly to the U.S. EPA. The Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.
- (4) Some changes have been made to paragraph (a) in order to clarify that any noncompliance is grounds for enforcement. A new paragraph has now been included as paragraph (b) to explain that only violations of federally enforceable conditions constitute violations of the Clean Air Act. Paragraph (d) has been added to clarify that an emergency does constitute a defense in an enforcement action if the Permittee complies with the emergency procedures.
 - B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]
 - (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act and is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.
 - (b) Noncompliance with any provisions of this permit, except any provision

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specifically designated as not federally enforceable, constitutes a violation

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- of the Clean Air Act.
- (b) (c) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- An emergency does constitute an affirmative defense in an enforcement (d) action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.
- (5) For clarification purposes, IDEM has made the following changes to this Condition. The Condition has been re-numbered as B.10.
 - Annual Compliance Certification [326 IAC 2-7-6(5)] B.10
 - The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent The certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- The annual compliance certification report shall include the following: (c)
 - The appropriate identification of each term or condition of this permit (1) that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;

- (4) The methods used for determining **the** compliance **status** of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
- (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) IDEM has changed Condition B.12 (Preventive Maintenance Plan) to include the record keeping requirements. The Condition has been re-numbered as B.11.
 - B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]
 - (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond it's the **Permittee's** control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (7) Regarding Condition B.13, now renumbered B.12, (Emergency Provisions), a reference to the Emergency Occurrence Report Form has been added to B.13(b)(5). The emergency form is for emergencies only, and is no longer an emergency and deviation form. All deviations will now be reported on the Quarterly Deviation and Compliance Monitoring Report. In paragraph (d) part of the first sentence has been deleted. For all Title V sources, the malfunction rule has been superceded by the emergency rule. In paragraph (f) "compliance" has been changed to "accordance".

Paragraphs (a), (b), and (g) have also been revised to reflect recent changes to 326 IAC 2-7-16.

B.12 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered:

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent notice, either in writing by mail or facsimile, of the emergency to:

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Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

(8) Some rule cites have been added to the title of Condition B.14 (Permit Shield). The Condition has been revised to state that the requirements listed in the permit are those applicable at the time of permit issuance. Paragraph (b) was deleted and replaced with a new condition number B.14 (see below). This Condition has been re-numbered as B.13.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13

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and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. All previously issued operating permits are superseded by this permit.
- (e)(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d)(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (e)(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance:
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f)(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g)(f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

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- (h)(g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(7)]
- (9) Condition B.15 has been deleted because 326 IAC 2-7-5(1)(E) has been repealed. 326 IAC 2-7-5(1)(E) was repealed because it conflicted with 40 CFR 70.6(a)(6).
 - B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

- (10) A new condition (numbered B.14) has been added to the permit to help clarify the intent of the new rule 326 IAC 2-1.1-9.5.
 - B.14 Prior Permit Conditions Superseded [326 IAC 2-1.1-9.5]
 - (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted

by this permit.

- (b) All previous registrations and permits are superseded by this permit.
- (11) The IDEM, OAQ, has revised Condition B.16 (now re-numbered B.15) Deviations from Permit Requirements and Conditions and certain Parametric Monitoring conditions in the D section of the permit to address concerns regarding the independent enforceability of permit conditions [see 40 CFR 70.6(a)(6)(i)]. The Parametric Monitoring conditions have been revised to establish normal operating conditions for the emission unit or control device and to require implementation of the compliance response plan when monitoring indicates operation is outside the normal range. Language that inferred that operating outside of the normal range could be considered by itself to be a deviation was removed. B.16 (now re-numbered B.15) was revised to remove language that could be considered to grant exemptions from permit requirements and to clarify reporting obligations.
 - B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]
 - (a) Deviations from any permit requirements (for emergencies see Section B Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Branch Data Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. except for the failure to perform the monitoring or record the information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
 - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) An emergency as defined in 326 IAC 2-7-1(12); or
 - (3) Failure to implement elements of the Preventive Maintenance Planunless such failure has caused or contributed to a deviation.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.
- (c) Written notification shall be submitted on the attached Emergency/Deviation
 Occurrence Reporting Form or its substantial equivalent. The notification does
 not need to be certified by the "responsible official" as defined by 326 IAC 2-71(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

D.2.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the cupola (101) at least once per shift when the cupola (101) is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, When for any one reading, the pressure drop across the baghouse shall be maintained within is outside the normal range of 2.0 - 9.0 inches of water or a range established during the latest stack test—The, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C -

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Compliance Monitoring Response Plan - Failure to Take Response Steps Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Similar changes were made to the other conditions requiring baghouse or scrubber parametric monitoring, specifically D.3.7, D.4.8, and D.6.7.

- (12) Condition B.19, now re-numbered B.18 (Permit Amendment or Modification) has been revised to clarify that 326 IAC 2-7-4(f) requires all applications to be certified by the responsible official. EPA has also requested this change.
 - B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]
 - (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
 - (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- (13) In Condition B.21 (now renumbered B.20), subsection (b)(1) has been deleted to make the Condition consistent with the language in the rule. The Subsection (b) has also been reorganized as follows.
 - B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]
 - (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). and the following additional conditions:
 - (1) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).
 - For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
 - (A)(1) A brief description of the change within the source;
 - (B)(2) The date on which the change will occur;
 - (C)(3) Any change in emissions; and

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(D)(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (14) Regarding Condition B.21 (Source Modification Requirement), 326 IAC 2 has been added to make the condition more complete. The language "applicable provisions" has been removed because it is unnecessary.
 - B.21 Source Modification Requirement [326 IAC 2] [326 IAC 2-7-10.5]

 A modification, construction, or reconstruction is governed by the applicable provisions of 326 IAC 2 and 326 IAC 2-7-10.5.
- (15) The following changes have been made to Condition B.23 (Inspection and Entry) in order to have the Condition be consistent with the language in the rule. The Condition has been renumbered as B.22.
 - B.22 Inspection and Entry [326 IAC 2-7-6(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit:
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements. [326 IAC 2-7-6(6)]
- (16) B.24, now renumbered B.23 (Transfer of Ownership or Operational Control) has been revised to clarify that 326 IAC 2-7-4(f) requires all applications to be certified by the responsible official. EPA has also requested this change.
 - B.24 Transfer of Ownership or Operational Control [326 IAC 2-7-11]
 - (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

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(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- (17) The following rule cite has been added to Subsection (a) of Condition B.25, now renumbered B.24 (Annual Fee Payment).

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. **Pursuant 326 IAC 2-7-19(b),** if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

Section C

- (1) The following revisions were made to Condition C.6 (Operation of Equipment) to clarify the condition.
 - C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided **by statute**, **rule**, **or** in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

- (2) Condition C.7 (Stack Height) has been modified to state which parts of the rules are not federally enforceable. The revised Condition is shown below.
 - C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. **The**

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provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

- (3) In Condition C.8 (Asbestos Abatement Projects), the rule cite 40 CFR 61, Subpart M, has replaced the rule cite 40 CFR 61.140 in the title of this Condition. Part 70 requires any application form, report, or compliance certification to be certified by the Responsible Official. IDEM, OAQ has revised C.8 Asbestos Abatement Projects to clarify that the asbestos notification does not require a certification by the responsible official, but it does need to be certified by the owner or operator. Changes are shown below.
 - C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140] [40 CFR 61, Subpart M]
 - (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (4) IDEM has made the following changes to Condition C.9 (Performance Testing) for clarification.
 - C.9 Performance Testing [326 IAC 3-6]
 - (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ within not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within not later than five (5) days prior to the end of the initial forty-five (45) day period.
- (5) Condition C.11 (Compliance Monitoring) has been modified. There are times when compliance monitoring is required by a new MACT rule, that the source may not have to comply with until sometime after the date of issuance of the Title V permit. Therefore, language has been added to clarify that the permit will specify (in Sections D) if the compliance monitoring doesn't have to start within 90 days. The same idea applies to new units, if there is a MACT applicable, but the source has 3 years to comply with it, IDEM would include the compliance monitoring requirements in the permit, but state in Section D that the monitoring would not have to begin until three years after the effective date of the MACT. In order to allow for this possibility, Condition C.11 (Compliance Monitoring) has been changed as follows.
 - C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

- (6) Rule cites have been added to Condition C.12 (Monitoring Methods) as shown below. The Condition has been renumbered C.12.
 - C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, **40 CFR 60 Appendix B, 40 CFR 63**, or other approved methods as specified in this permit.

- (7) The following changes have been made to Condition C.13.
 - C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
 - (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
 - (b) Whenever a condition in this permit requires the measurement of a temperature, flow rate, or pH level, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
 - (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring

the measurement of pressure drop or other parameters.

(8) For clarification purposes, the following changes have been made to Condition C.14 (Maintenance of Emission Monitoring Equipment).

C.14 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less **often** than one (1) once per hour until such time as the continuous monitor is back in operation.

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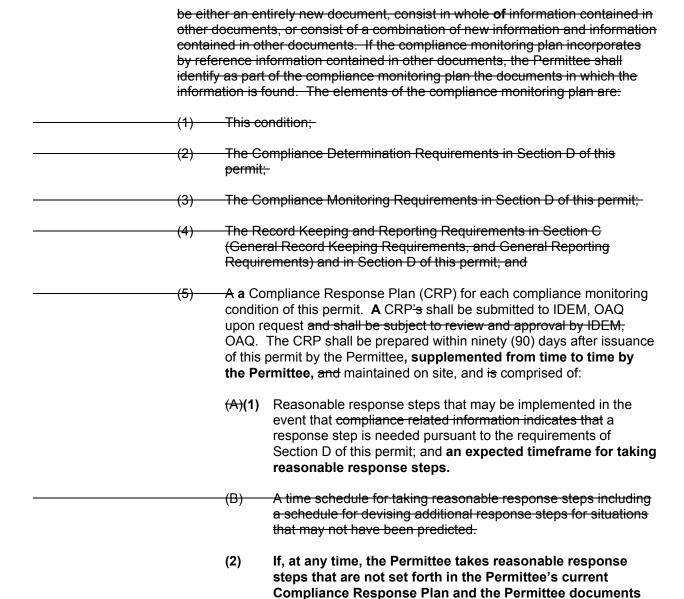
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- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.
- (9) The following changes have been made to Condition C.16 (Risk Management Plan).
 - C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

 If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:
 - (a) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
 - (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
 - (c) A verification to IDEM, OAQ, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (10) The IDEM, OAQ has restructured C.17 to clarify the contents and implementation of the compliance response plan. The language regarding the OAQ's discretion to excuse failure to perform monitoring under certain conditions has been deleted. The OAQ retains this discretion to excuse minor incidents of missing data; however, it is not necessary to state criteria regarding the exercise of that discretion in the permit.
 - C.17 Compliance Monitoring Response Plan Failure to Take Response Steps Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]
 - (a) The Permittee is required to **prepare** implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can



(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows: Failure to take reasonable response steps shall constitute a violation of the permit.

include such response steps taken.

- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
- (2) If none of the reasonable response steps listed in the Compliance

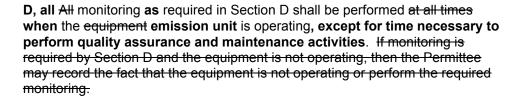
such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to

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Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

- (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
- (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) Upon investigation of a compliance monitoring excursion, the The Permittee is excused from taking not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment a minor permit modification to the permit, and such request has not been denied.; or
 - (3) An automatic measurement was taken when the process was not operating.; or
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (d)(e) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (e) Except as otherwise provided by a rule or provided specifically in Section

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- (f) If for reasons beyond its control, the Permittee fails to perform the monitoring and record keeping as required by Section D, then the reasons for this must be recorded.
- (1) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent of the operating time in any quarter.
 - (2) Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.
- (11) Part 70 requires any application form, report, or compliance certification to be certified by the Responsible Official. IDEM, OAQ has revised C.18 Actions Related to Noncompliance Demonstrated by a Stack Test; a certification by the responsible official is required for the notification sent in response to non-compliance with a stack test.
 - C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]
 - (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the corrective actions are being implemented.
 - (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
 - (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (12) Regarding Condition C.19 (Emission Statement), the word "estimated" was added to (a)(1) and (a)(2) because that is how 326 IAC 2-6 describes emissions.
 - C.19 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]
 - (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year

and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

- (1) Indicate **estimated** actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
- (2) Indicate **estimated** actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.
- (13) Subsections (b) and (c) of Condition C.20 (General Record Keeping Requirements) have been removed because they are unnecessary. In Subsection (a), the word "monitoring" was removed because the condition applies to all record keeping. The word "reports" was added to clarify that the source must keep copies of those as well. Changes to the Condition are shown below.
 - C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
 - (a) Records of all required monitoring data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
 - (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
 - (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation:
 - (3) All calibration and maintenance records:
 - (4) Records of preventive maintenance.

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(d)(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

- (14) Regarding Condition C.21 (General Reporting Requirements), the Semi-Annual Compliance Monitoring Report is now the Quarterly Deviation and Compliance Monitoring Report.

 References to the emergency report have been removed. Changes in (d) clarify that the report does need to be certified by the responsible official. This change is also reflected in all the D sections and the reporting forms. EPA has also requested this change (regarding certifications). The changes to Condition C.21 are shown below.
 - C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]
 - To affirm that the source has met all the compliance monitoring requirements stated in this permit The source shall submit a the attached Semi-Annual Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from the permit requirements, and, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
 - (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:
 - Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015
 - (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
 - (d) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do -not-require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
 - (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports. The Emergency/Deviation Occurrence Report does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
 - (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
 - (g)(e) The first report shall cover the period commencing on the date of issuance of

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this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Sections D

(1) The following statement has been added to the compliance monitoring conditions in the various D sections of the permit. The affected Conditions are D.2.6 (Visible Emissions Notations), D.2.7 (Parametric Monitoring), D.2.9 (Broken or Failed Bag Detection), D.3.6 (Visible Emissions Notations), D.3.7 (Parametric Monitoring), D.3.9 (Broken or Failed Bag Detection), D.4.7 (Visible Emissions Notations), D.4.8 (Parametric Monitoring), D.4.10 (Broken or Failed Bag Detection), D.5.5 (Parametric Monitoring), D.5.7 (Failure Detection), D.6.7 (Scrubber Parametric Monitoring), D.6.9 (Scrubber Failure Detection), D.6.10 (Visible Emissions Notations), and D.6.11 (Parametric Monitoring).

Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(2) For clarification, the following changes have been made to Conditions D.2.9, D.3.9, and D.4.10 (Broken or Failed Bag Detection).

D.2.9 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (3) For clarification purposes, the following changes have been made to Condition D.2.5.

D.2.5 Control Equipment [326 IAC 9-1]

(a) In order to comply with the requirements of Conditions D.2.1, the The

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baghouse BH-3 for PM and PM10 control shall be in operation at all times when the cupola is in operation and during startup of the cupola.

(4) For clarification purposes, the following changes have been made to Condition D.3.5.

D.3.5 Particulate Matter Controls

In order to comply with the requirements of Conditions D.3.1 and D.3.2, all All of the control devices listed in this section shall be in operation at all times when the associated processes are in operation.

(5) For clarification purposes, the following changes have been made to Condition D.4.6.

D.4.6 Particulate Matter Controls

In order to comply with the requirements of Conditions D.4.1 and D.4.2, all All of the control devices listed in this section shall be in operation at all times when the associated shotblast machine or grinder is in operation.

(6) For clarification purposes, the following changes have been made to Condition D.6.6.

D.6.6 Control Equipment

- (a) In order to comply with the requirements of Condition D.6.1, the The scrubber shall be in operation at all times when either of the associated core machines is in operation.
- (b) In order to comply with the requirements of Conditions D.6.2 and D.6.3, the The cartridge filter bin vent filter shall be in operation at all times when the core sand handling process is in operation.
- (7) IDEM has determined that it is not necessary for the source to document the baghouse cleaning cycles. This requirement has been deleted from the record keeping requirements of Conditions D.2.10, D.3.10, and D.4.11. The change to Condition D.2.10(b) is shown below as an example.

D.2.10 Record Keeping Requirements

- (b) In order to document compliance with condition D.2.7, the Permittee shall maintain records of the **inlet and outlet differential static pressure** following operational parameters once per shift during normal operation when venting to the atmosphere:
 - (1) Inlet and outlet differential static pressure; and
- (2) Cleaning cycle: frequency and differential pressure.
- (8) The quarterly reports require a signed certification. Therefore, the reporting forms in Sections D have been changed accordingly.

D.4.12 Reporting Requirements

Pursuant to Significant Source Modification 005-11795-00006 issued August 29, 2000, a quarterly summary of the information to document compliance with Conditions D.4.3 shall be submitted to the address in Section C - General Reporting Requirements, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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D.5.9 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.5.1 (b) and (d) shall be submitted to the address in Section C - General Reporting Requirements, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

D.6.14 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.6.1 shall be submitted to the address in Section C - General Reporting Requirements, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Changes throughout the Permit

(1) The Office of Air Management (OAM) has changed its name to the Office of Air Quality (OAQ). This change has been made throughout the permit.

Forms

- (1) The Emergency/Deviation Occurrence Report Form is now called the Emergency Occurrence Report. All references to deviations have been removed. These forms should be sent to the Compliance Branch, not the Compliance Data Section. IDEM has negotiated with EPA on the reporting of emergencies. They agree to allow the 2 day notification to come in without the responsible official certification as long as the emergencies are included in the Quarterly Deviation and Compliance Monitoring Report. That report is certified by the responsible official, and will therefore comply with the Part 70 rule requirement to have all reports certified.
- (2) The quarterly reports will now need to be certified by the responsible official, therefore the last line in each of these reports has been changed from "A certification is not required for this report." to "Attach a signed certification to complete this report".
- (3) The Semi-Annual Compliance Monitoring Report, is now called the Quarterly Deviation and Compliance Monitoring Report. The form now requires the source to not only report that there were deviations, but to also include the probable cause and the response steps taken. IDEM is no longer requiring sources to report deviations in ten days, therefore the source will need submit this report quarterly. For sources with an applicable requirement which gives an alternate schedule for reporting deviations, those deviations will not need to be reported quarterly, but instead should be reported according to the schedule in the applicable requirement.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

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OP No. T005-6001-00006

COMPLIANCE DATA SECTION BRANCH

P.O. Box 6015 100 North Senate Avenue Indianapolis, Indiana 46206-6015

Phone: 317-233-5674 Fax: 317-233-5967

PART 70 OPERATING PERMIT EMERGENCY/DEVIATION OCCURRENCE REPORT

Source Name: Golden Casting Corporation

If any of the following are not applicable, mark N/A

Source Address: 1616 Tenth Street, Columbus, Indiana 47201 Mailing Address: 1616 Tenth Street, Columbus, Indiana 47201

Part 70 Permit No.: T005-6001-00006

This form consists of 2	pages	Page 1 of 2		
Check either No. 1 or No.2				
9 1. This is an emerg	gency as defined in 326 IAC 2-	7-1(12)		
		Air Quality (OAQ), within four (4) business 4, ask for Compliance Section); and		
		ting by mail or by facsimile within two (2) days of follow the other requirements of 326 IAC 2-		
	on, reportable per 326 IAC 2-7- mittee must submit notice in wri	5(3)(C) ting within ten (10) calendar days		

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency /Deviation :
Describe the cause of the Emergency /Deviation :

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If any of the following are not applicable	e, mark N/A	Page 2 of 2		
Date/Time Emergency /Deviation start	red:			
Date/Time Emergency /Deviation was	corrected:			
Was the facility being properly operate Describe:	ed at the time of the emergency/ deviation ?	Y N		
Type of Pollutants Emitted: TSP, PM-	10, SO ₂ , VOC, NO _X , CO, Pb, other:			
Estimated amount of pollutant(s) emit	ted during emergency /deviation :			
Describe the steps taken to mitigate the	he problem:			
Describe the corrective actions/respon	nse steps taken:			
Describe the measures taken to minir	nize emissions:			
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:				
Form Completed by:				
Title / Position:				
Date:				
Phone:				
	A certification is not required for this report.			

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION**

PART 70 OPERATING PERMIT QUARTERLY SEMI-ANNUAL DEVIATION and COMPLIANCE MONITORING

REPORT Golden Casting Corporation Source Name: 1616 Tenth Street, Columbus, Indiana 47201 Source Address:

Mailing Address: Part 70 Permit No.:	T005-6001-0000	,	s, Indiana 47201	
Mon	ths:	_ to	Year:	 Page 1 of 2
stated in this permit. year. Any deviation fr the probable cause of following exceptions: I shall be reported accorded to be included be supplemented by a	This report shall to the compliant of the deviation, Deviations that a cording to the so in this report. A attaching the Eme	pe submitted be monitoring and the resp are required chedule state dditional pag ergency/Device	requirements, and the conse steps taken mu to be reported by an ed in the applicable re	Hy based on a calendar e date(s) of each deviation, ust be reported. with the applicable requirement equirement and do not necessary. This form can ort. If no deviations
9 NO DEVIATIONS C	OCCURRED THIS	S REPORTIN	G PERIOD.	
9 THE FOLLOWING	DEVIATIONS OC	CURRED T	HIS REPORTING PER	IOD
Compliance Monitor	ing <mark>Permit</mark> Requ	irement (spe	ecify permit condition #)
Date of each Deviation	on:		Duration of Deviation	n:
Number of Deviation	ıs:			
Probable Cause of D	eviation:			
Response Steps Tak	en:			
Compliance Monitor	ing <mark>Permit</mark> Requ	irement (spe	ecify permit condition #)
Date of each Deviation	on:		Duration of Deviation	n:
Number of Deviation	ıs:			
Probable Cause of D	eviation:			
Response Steps Tak	<mark>æn:</mark>			

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Page 2 of 2

	1 39 - 3						
Compliance Monitoring Permit Requirement (specify permit condition #)							
Date of each Deviation:	Duration of Deviation:						
Number of Deviations:							
Probable Cause of Deviation:							
Response Steps Taken:							
Compliance Monitoring Permit Requirement	(specify permit condition #)						
Date of each Deviation:	Duration of Deviation:						
Number of Deviations:							
Probable Cause of Deviation:							
Response Steps Taken:							
Compliance Monitoring Permit Requirement	(specify permit condition #)						
Date of each Deviation:	Duration of Deviation:						
Number of Deviations:							
Probable Cause of Deviation:							
Response Steps Taken:							
Form Completed By:							
, ,							
Title/Position:	·						
Date:							
Phone:							

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name: Golden Casting Corporation

Source Location: 1616 Tenth Street, Columbus, Indiana 47201

County: Bartholomew

SIC Code: 3321

Operation Permit No.: T005-6001-00006 Permit Reviewer: Nisha Sizemore

The Office of Air Management (OAM) has reviewed a Part 70 permit application from Golden Casting Corporation relating to the operation of a gray iron foundry, which is considered a secondary metal production facility, one of the 28 listed source categories pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration).

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) The scrap and charge handling process, constructed prior to 1968, identified as 103 with a maximum capacity of 22 tons of metal per hour with emissions uncontrolled.
- (b) One (1) cupola, identified as 101, constructed prior to 1968 with a maximum capacity of 22 tons of metal per hour with emissions controlled by a baghouse, BH-3, and an afterburner, AB-1, exhausting through stack SC-1.
- (c) Moldmaster pouring process, identified as 315, constructed in 1962 with a maximum capacity of 18 tons of metal per hour and 105 tons of sand per hour with emissions controlled by a baghouse, BH16, exhausting through stack SC-5.
- (d) Moldmaster cooling process, identified as 316 and 317, constructed in 1964 with a maximum capacity of 18 tons of metal per hour and 105 tons of sand per hour with emissions controlled by two (2) baghouses, BH-12 and BH-13, exhausting through stacks SC7A and SC7B.
- (e) Moldmaster casting shakeout process, identified as 318 and 320, constructed in 1964 with a maximum capacity of 18 tons of metal per hour and 105 tons of sand per hour with emissions controlled by one (1) baghouse, BH-1, exhausting through stack SC9.
- (f) Moldmaster sand system and muller, identified as 311 and 313, constructed in 1962 with a maximum capacity of 105 tons of sand per hour with emissions controlled by one (1) rotoclone, RC-1, exhausting through stack SC-6.

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Golden Casting Corporation Columbus, Indiana Permit Reviewer: Nisha Sizemore

- (g) Stationmaster pouring process, identified as 342, constructed before 1977 with a maximum capacity of 2 tons of metal per hour and 11 tons of sand per hour with emissions uncontrolled and exhausting internally.
- (h) Stationmaster cooling process, identified as 343, constructed before 1977 with a maximum capacity of 2 tons of metal per hour and 11 tons of sand per hour with emissions uncontrolled and exhausting internally.
- (i) Stationmaster casting shakeout process, identified as 344, constructed in 1994 with a maximum capacity of 2 tons of metal per hour and 11 tons of sand per hour with emissions controlled by one (1) baghouse, BH-15, exhausting through stack SC-12.
- (j) Stationmaster sand system and muller, identified as 341, constructed before 1977 with a maximum capacity of 11 tons of sand per hour with emissions controlled by one (1) baghouse, BH-15, exhausting through stack SC-12.
- (k) Slinger pouring process, identified as 374, constructed before 1968 with a maximum capacity of 2 tons of metal per hour and 8 tons of sand per hour and emissions controlled by a rotoclone, RC-2, exhausting through stack SC-24.
- (I) Slinger cooling process, identified as 375, constructed before 1968 with a maximum capacity of 2 tons of metal per hour and 8 tons of sand per hour and emissions controlled by a rotoclone, RC-2, exhausting through stack SC-24.
- (m) Slinger casting knockout process, identified as 376, constructed before 1968 with a maximum capacity of 2 tons of metal per hour and 8 tons of sand per hour and emissions controlled by a rotoclone, RC-2, exhausting through stack SC-24.
- (n) Slinger sand system and muller, identified as 371, 372, and 373, constructed before 1968 with a maximum capacity of 8 tons of sand per hour with emissions controlled by one (1) rotoclone, RC-2, exhausting through stack SC-24.
- (o) Shotblasting operations consisting of the following:
 - (1) Plant 1 Blast, identified as 450, to be constructed in 2001 with a maximum capacity of 30 tons of metal per hour with emissions controlled by baghouse BH-10, exhausting through stack SC-22.
 - N. Tumble Blast, identified as 443-1, constructed before 1968 with a maximum capacity of 7 tons of metal per hour with emissions controlled by a baghouse, BH-7, exhausting through stack SC-19A.
 - (3) M. Tumble Blast, identified as 443-2, constructed before 1968 with a maximum capacity of 7 tons of metal per hour with emissions controlled by a baghouse, BH-8, exhausting through stack SC-19B.
 - (4) S. Tumble Blast, identified as 443-3, constructed before 1968 with a maximum capacity of 7 tons of metal per hour with emissions controlled by a baghouse, BH-9, exhausting through stack SC-19C.
 - (5) 42 Blast, identified as 442, constructed before 1977 with a maximum capacity of 7 tons of metal per hour with emissions controlled by a baghouse, BH-14, exhausting through stack SC-18.
 - (6) North Pangborn Blast, identified as 444, constructed before 1968 with a

maximum capacity of 15 tons of metal per hour with emissions controlled by a baghouse, BH-11, exhausting through stack SC-20.

- (p) Grinding operations consisting of the following:
 - (1) Head cleaning and stand grinders, identified as 447, constructed before 1977 with a maximum capacity of 14 tons of metal per hour total with emissions controlled by one (1) baghouse, BH-5, exhausting through stack SC-16.
 - Two (2) Block grinders, identified as 441, constructed in 1986 with a maximum capacity of 16 tons of metal per hour total with emissions controlled by one (1) baghouse, BH-4, exhausting through stack SC-17.
 - (3) Swing grinder, identified as 446, constructed before 1977 with a maximum capacity of 15 tons of metal per hour with emissions controlled by one (1) baghouse, BH-4, exhausting through stack SC-17.
- (q) Core making operations consisting of the following:
 - (1) Eight (8) Isocure core machines, identified as 201, constructed in 1972 with a maximum capacity of 8 tons of cores per hour total with emissions controlled by a scrubber, SB-2, exhausting through stack SB-2.
 - (2) One (1) Cold Box core machine, identified as 202, constructed in 1986 with a maximum capacity of 1 ton of cores per hour with emissions controlled by a scrubber, SB-3, exhausting through stack SB-3.
 - (3) Six (6) Cold Box core machines, identified as 203, constructed in 1986 with a maximum capacity of 6 tons of cores per hour total with emissions controlled by a scrubber, SB-4, exhausting through stack SB-4.
 - (4) Two (2) Cold Box core machines, identified as 204, constructed in 1993 with a maximum capacity of 2 tons of cores per hour total with emissions controlled by a scrubber, SB-4, exhausting through stack SB-4.
 - (5) Three (3) Isocure core machines, identified as 205, 206, and 207, constructed prior to 1977 with a maximum capacity of 3 tons of cores per hour with emissions controlled by a scrubber, SB-5, exhausting through stack SB-5.
 - (6) One (1) Pepset core system, identified as 208, constructed prior to 1977 with a maximum capacity of 2 tons of cores per hour with emissions uncontrolled exhausting through stack SU-14.
 - (7) One (1) Airset core system, identified as 209, constructed prior to 1977 with a maximum capacity of 2 tons of cores per hour with emissions uncontrolled exhausting through stack SU-15.
 - (8) One (1) Sutter core machine, identified as 210, constructed before 1977 with a maximum capacity of 1 tons of cores per hour with emissions uncontrolled exhausting through stacks SU-12 and SU-13.
 - (9) Two (2) Demler core machines, identified as 211 and 212, constructed before 1977 with a maximum capacity of 2 tons of cores per hour total with emissions uncontrolled exhausting through stacks SU-12 and SU-13.
 - (10) One (1) Shalco core machine, identified as 213, constructed before 1977 with a maximum capacity of 1 ton of cores per hour with emissions uncontrolled

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Golden Casting Corporation Columbus, Indiana Permit Reviewer: Nisha Sizemore

exhausting through stacks SU-12 and SU-13.

- (11) One (1) core machine, identified as 214, constructed before 1977 with a maximum capacity of 1 ton of cores per hour with emissions uncontrolled exhausting through stacks SU-12 and SU-13.
- (12) One (1) MC5 core machine, identified as 215, constructed before 1977 with a maximum capacity of 1 ton of cores per hour with emissions uncontrolled exhausting through stacks SU-12 and SU-13.
- (13) One (1) Shell core machine, identified as 216, constructed before 1977 with a maximum capacity of 1 ton of cores per hour with emissions uncontrolled exhausting through stacks SU-12 and SU-13.
- (14) Two (2) Isocure core machines and sand handling system, identified as 200, constructed in 1997 and 1998 with a maximum capacity of 12.3 tons of cores per hour with emissions controlled by an acid scrubber, SB-1, for VOC control and a cartridge filter for particulate control exhausting through stack SB-1.
- (15) One (1) core sand handling system, constructed in 1997 with a maximum capacity of 123 tons of sand per hour with particulate emissions controlled by a cartridge filter and exhausting through stack SB-1.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour including:
 - (1) One (1) electric induction holding furnace, identified as 102, constructed before 1968 with a maximum capacity of 22 tons of metal per hour with emissions uncontrolled.
- (b) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (c) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (d) Vessels storing lubricating oils, hydrating oils, machining oils, and machining fluids.
- (e) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings.
- (f) Cleaners or solvents having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (g) The following equipment related to manufacturing activities not resulting in the emission

of HAPs; brazing equipment, cutting torches, soldering equipment, welding equipment.

- (h) Solvent recycling systems with batch capacity less than or equal to 100 gallons.
- (i) Forced and induced draft cooling tower system not regulated under a NESHAP.
- (j) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (k) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone.
- (I) Equipment used to collect any material that might be released during a malfunction, process upset, or spill clean-up, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (m) Blowdown from any of the following: sight glass; boiler; compressor; pumps; and cooling tower.
- (n) On-site fire and emergency response training approved by the department.
- (o) Diesel generators not exceeding 1600 horsepower.
- (p) Stationary fire pumps.
- (q) Filter or coalescer media change out.
- (r) Mold release agents using low volatile products (vapor pressure less than of equal to 2 kilopascals measured at 38 degrees (C).

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) Operation Permit 03-06-87-0119, issued June 30, 1983;
- (b) Operation Permit 03-06-87-0120, issued June 30, 1983;
- (c) Operation Permit 03-06-87-0121, issued June 30, 1983;
- (d) Operation Permit 03-06-87-0122, issued June 30, 1983;
- (e) Registration, issued May 1, 1986;
- (f) CP005-3370-00006, issued June 28, 1994;
- (g) CP005-7081-00006, issued March 12, 1997;
- (h) Interim Permit 005-11795I-00006, issued April 10, 2000; and
- (i) Significant Source Modification 005-11795-00006, issued August 29, 2000.

All conditions from previous approvals were incorporated into this Part 70 permit.

Enforcement Issue

There are no enforcement actions pending.

The source entered into an Agreed Order with IDEM on June 13, 1988 for alleged violations of 326 IAC 6-4. The conditions of this order are not included as permit conditions because the order has expired.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively incomplete Part 70 permit application for the purposes of this review was received on a May 31, 1996. Additional information received on June 5, 1998, made the Part 70 permit application administratively complete.

A notice of completeness letter was mailed to the source on April 17, 1998.

Emission Calculations

See Appendix A of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year)
PM	greater than 100
PM-10	greater than 100
SO ₂	greater than 100
VOC	greater than 100
CO	greater than 100
NO _x	less than 100

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Naphthalene	less than 10
Formaldehyde	less than 10
TEA	greater than 10
TOTAL	greater than 25

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM10, SO₂, VOC, and CO are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1997 OAM emission data.

Pollutant	Actual Emissions (tons/year)
PM	19.527
PM-10	86.411
SO ₂	33.565
VOC	214.565
СО	5,299.968
NO _x	3.989

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	СО	NO _x	HAPs
Scrap and charge handling (EU103)	142.35	-	_	-	-	-	
Cupola (EU101 and BH-3)	168.19	_	_	-	_	-	-
Moldmaster pouring (EU315 and BH16)	233.89	-	-	-	-	-	1
Moldmaster cooling (EU316 and EU317 and BH-12 and BH-13)	233.89	-	_	-	-	-	-
Moldmaster casting shakeout (EU318 and EU320, and BH-1)	233.89	-	_	-	-	-	-
Moldmaster sand handling and muller (EU311 and 313 and RC-1)	226.88						
Stationmaster pouring (EU342)	100.30	-	_	-	-	-	
Stationmaster cooling (EU343)	100.30	-	_	-	_	-	_
Stationmaster casting shakeout and sand handling (EU344 and EU341, and BH-15)	24.0	14.0	-	-	-	-	_

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	СО	NO _x	HAPs
Slinger pouring, cooling, shakeout, and sand handling (EU371 through 376, and RC- 2)	84.10	-	-	-	-	-	1
Plant 1 shotblast (EU450 and BH-10)	24.0	14.0	-	-	ı	-	1
N. Tumble Blast (EU443-1 and BH-7)	66.14	-	-	-	-	-	1
M. Tumble Blast (EU443-2 and BH-8)	66.14	-	-	-	-	-	1
S. Tumble Blast (EU443-3 and BH-9)	66.14	-	-	-	-	-	-
42 Blast (EU442 and BH-14)	66.14	-	-	-	-	-	-
N&S Pangborn Blast (EU444 and BH-11)	110.38	-	-	-	-	-	-
Block grinders (EU441) and swing grinder (EU446) BH-4	112	-	-	-	-	-	-
head cleaning and stand grinders (EU447 and BH-5)	23						
core machines (EU202 and EU203)	0.0	-	-	24.0	-	-	-
core machines (EU204)	0.0	-	-	24.0	-	-	-
core sand handling system	24	14					
Isocure core machines (201, 205-217)							
Two (2) Isocure core machines (EU200) and scrubber SB-1	0.0	-	-	5.87	-	-	_
Total Emissions	2105.73	42.0		53.87	_	_	

County Attainment Status

The source is located in Bartholomew County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
СО	attainment
Lead	attainment

Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_{χ} emissions are considered when evaluating the rule applicability relating to the ozone standards. Bartholomew County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Parts 61 or 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This existing source is a major stationary source because it is one of the 28 listed source categories (secondary metal production) and at least one attainment regulated pollutant is emitted at a rate of 100 tons per year. This source went through PSD review for core making machines installed in 1997 pursuant to construction permit 005-7081-00006.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM, PM10, SO_2 , VOC, and CO. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

STATE RULE APPLICABILITY - INDIVIDUAL FACILITIES

326 IAC 6-3-2 (Process Operations)

Pursuant to this rule the particulate matter (PM) from the facilities having the potential to emit particulate matter shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where $E =$ rate of emission in pounds per hour and $P =$ process weight rate in tons per hour

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$
 where $E =$ rate of emission in pounds per hour and $P =$ process weight rate in tons per hour

Limits pursuant to 326 IAC 6-3-2 (Process Operations)							
Process/facility	Maximum Process Weight Rate (tons/hr)	Allowable PM Emissions (pounds per hour)	Allowable PM Emissions (tons per year)				
scrap and charge handling	22	32.5	142				
cupola	22	38.4*	168				
moldmaster pouring, cooling, and shakeout	123	53.4 (each)	234 (each)				
Stationmaster pouring, cooling, and shakeout/sand handling	13	22.9 (each)	100 (each)				
Slinger pouring, cooling, shakeout and sand handling	10	19.2	84				
three tumbleblasts and 42 blast	7	15.1 (each)	66 (each)				
North Pangborn Blast	7.5	15.8	69				
Plant 1 Blast	30	40.0	175				
head cleaning and stand grinders	14	24.0	105				
Moldmaster sand handling	105	51.8	227				
core sand handling	123	53.4	234				
block grinders	16	26.3	115				
swing grinder	15	25.2	110				

The particulate control devices shall be in operation at all times the corresponding facilities are in operation, in order to comply with these limits. Based on calculations shown in Appendix A, the facilities can comply with these limits.

*Note: The limit shown for the cupola is pursuant to the requirements of 326 IAC 11-1 (Existing Foundries: Particulate Matter Limitations). See calculations in Appendix A (page 1). All other limits in the table are pursuant to 326 IAC 6-3-2 (Process Operations).

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

- (a) In order to render the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable to the Stationmaster casting shakeout system, the following conditions shall apply:
 - (1) The PM emissions from the baghouse BH15 controlling the Stationmaster casting shakeout and sand handling process and the shall not exceed 5.48 pounds per hour.
 - (2) The PM-10 emissions from the baghouse BH15 controlling the Stationmaster casting shakeout and sand handling process shall not exceed 3.20 pounds per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 do not apply. Based on calculations the baghouse BH15 controlling the Stationmaster casting shakeout and sand handling process is in compliance with this requirement.

- (b) In order to render the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable to the Plant 1 Blast shotblast machine and the grinders, the following conditions shall apply:
 - (1) Pursuant to Significant Source Modification 005-11795-00006 issued August 29, 2000, the PM emissions from the baghouse BH10 controlling the Plant 1 Blast shotblast machine shall not exceed 5.48 pounds per hour.
 - (2) Pursuant to Significant Source Modification 005-11795-00006 issued August 29, 2000, the PM10 emissions from the baghouse BH10 controlling the Plant 1 Blast shotblast machine shall not exceed 3.19 pounds per hour.
 - (3) The PM emissions from the baghouse BH5 controlling the head cleaning and stand grinders shall not exceed 5.25 pounds per hour.
 - (4) The PM emissions from the baghouse BH4 controlling the two (2) block grinders shall not exceed 0.23 pound per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 shall not apply. Based on calculations the Plant 1 Blast and block grinders are in compliance with these requirements.

- (c) Pursuant to CP005-7081, issued on March 12, 1997, in order to render the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable to the core sand handling process, the following conditions shall apply:
 - (1) The PM emissions from the cartridge filter controlling the core sand handling process shall not exceed 5.48 pounds per hour.
 - (2) The PM10 emissions from the cartridge filter controlling the core sand handling process shall not exceed 3.20 pounds per hour.
 - (3) The outlet grain loading from the cartridge filter controlling the core sand handling process shall not exceed 0.03 grains per dry standard cubic foot of exhaust air.

PSD BACT Limits

Pursuant to 326 IAC 2-2-3, 326 IAC 8-1-6 (BACT), and construction permit 005-7081-00006 issued on March 12, 1997, PSD BACT for the two Isocure core machines (200) shall consist of the following conditions:

- (a) The volatile organic compounds (VOC) generated from the catalyst added to the Isocure core machines (200) shall be controlled by an acid scrubber system. The VOC emissions from stack SB-1 shall not exceed 1.34 pounds per hour.
- (b) The core machines (200) shall be limited to a maximum production rate of 5,417 tons of cores per month. This production limitation will lower the potential emissions from the source.

This will also satisfy the requirements of 326 IAC 8-1-6 (BACT).

326 IAC 8-1-6 (BACT)

- (a) The VOC emissions from the scrubber SB-3 controlling the cold box core machine constructed in 1986 (identified as emission unit 202), shall not exceed 2.74 pounds per hour.
- (b) The sand throughput to the one (1) Cold box core machine constructed in 1986 (identified as emission unit 202) shall not exceed 68,571 tons per 12 consecutive month period.
- (c) The VOC emissions from the six (6) cold box core machines identified as emission unit 203 shall not exceed 2.74 pounds per hour (total for all six machines).
- (d) The VOC emissions from the two (2) cold box core machines identified as emission unit 204 shall not exceed 5.48 pounds per hour (total for both machines).
- (e) The VOC emissions from the scrubber SB-4 controlling the cold box core machines (identified as emission unit 203 and 204), shall not exceed 5.48 pounds per hour (total for all eight machines).
- (f) The sand throughput to the cold box core machines (identified as emission unit 203 and 204) shall not exceed 205,713 tons per 12 consecutive month period for all machines total.

Therefore, the requirements of 326 IAC 8-1-6 (BACT) shall not apply. Compliance with above limit(s) will also render the requirements of 326 IAC 2-2 not applicable. The scrubbers shall be in operation at all times the core machines are in operation, in order to comply with these limits.

326 IAC 9-1 (CO Emissions)

Pursuant to 326 IAC 9-1 (CO Emissions), the afterburner AB-1 shall be in operation at all times when the cupola (101) is in operation.

Compliance Requirements

Permits issued under 326 IAC 2-7are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section

D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

- Visible emissions notations of all of the controlled stack exhausts shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.
- (b) The Permittee shall record the total static pressure drop across all of the baghouses and the cartridge filter, at least once per shift when the associated processes are in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 2.0 to 9.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.
- (c) An inspection shall be performed each calender quarter of all bags controlling the foundry processes. All defective bags shall be replaced.
- (d) In the event that bag failure has been observed.
 - (1) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).
 - (2) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).
- (e) The Permittee shall monitor and record the acid content, pressure drop, and flow rate of each of the scrubbers, at least once per shift when the associated core machines are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across each of the scrubbers shall be maintained within the range of 1.0 and 4.0 inches of water, or a range established during the latest stack test. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the flow rate of each of the

scrubbers shall be maintained at no less than 50 gallons per minute, or a minimum established during the latest stack test. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the acid content of each of the scrubbers shall be maintained at or below a pH level of 2, or an acid content established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading, or when the flow rate is below the above mentioned minimum level for any one reading, or when the pH level is above the above mentioned maximum for any one reading.

The instruments used for determining the pressure, flow rate, and pH level shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

- (f) An inspection shall be performed each calender quarter of each of the scrubbers controlling the core machines. A scrubber inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. The Permittee shall maintain records of the results of the scrubber inspections.
- (g) In the event that a scrubber failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(h) The Permittee shall perform stack tests as shown in the table below using methods as approved by the Commissioner. PM-10 includes filterable and condensible PM-10.

Facilities to be tested	Pollutants for which to test	Testing Schedule
cupola	PM	Within 180 days after permit issuance, then once every 2.5 years
baghouse BH15 controlling Stationmaster shakeout and sand handling operations	PM and PM10	Within 24 months after permit issuance, then once every 5 years
baghouse BH10 controlling the Plant 1 Blast shotblast machine	PM and PM10	Within 180 days after startup, then once every 5 years
cartridge filter controlling core sand handling system	PM and PM10	Within 180 days after permit issuance, then once every 5 years
scrubber SB-1 controlling the two Isocure core machines (identified as 200)	VOC	Within 180 days after permit issuance, then once every 2.5 years
scrubbers SB-3 and SB-4 controlling cold box core machines (identified as 202, 203, and 204)	VOC	Within 180 days after permit issuance, then once every 5 years

These monitoring conditions are necessary because the control devices must operate properly to ensure compliance with 326 8-1-6 (BACT), 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), 326 IAC 6-3 (Process Operations), 326 IAC 11-1 (Existing Foundries), 326 IAC 5-1 (Opacity), and 326 IAC 2-7 (Part 70).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

This source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the 1990 Clean Air Act Amendments.

Conclusion

The operation of this gray iron foundry shall be subject to the conditions of the attached proposed **Part 70 Permit No. T005-6001-00006**.

Potential Emissions

Appendix A: Emission Calculations

Company Name: Golden Casting Corporation

Plant Location: 1616 Tenth Street, Columbus, Indiana 47201

County: Bartholomew County
Permit Reviewer: Nisha Sizemore
Title V #: T005-6001-00006
Plt. ID #: 005-00006

* * Process Emissions * *

Process:	Rate	Pollutant	Ef	Ebc	Eac	Type of control	Control Efficiency
	(tons iron/hr)	· onatant	(lb/ton produced)	(ton/yr)	(ton/yr)	. , po o. com	(%)
Scrap and Charge	22	PM	0.60	57.82	57.82	none	
Handling - 103		PM-10	0.36	34.69	34.69		
SCC# 3-04-003-15		SO2	0.00	0.00	0.00		
AP-42 Ch. 12.10		NOx	0.00	0.00	0.00		
		VOC	0.00	0.00	0.00		
		CO	0.00	0.00	0.00		
		Lead	0.00	0.00	0.00		

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

P= 22 tons/hr

limit = $4.1 \times ($ 22 $^{\circ}0.67)$ = 32.5 lb/hr (allowable)

with potential:

57.8 tons/yr x 2000 lb/ton / 8760 hr/yr = 13.2 lb/hr (will comply)

Process:	Rate	Pollutant	Ef (lla (tana ann adus and l	Ebc	Eac	Type of control	
	(tons iron/hr)		(lb/ton produced)	(ton/yr)	(ton/yr)		(%)
Cupola - 101	22	PM	13.80	1329.77	13.30	baghouse	99.00%
EPA SCC# 3-04-003-01		PM-10	12.40	1194.86	11.95	BH-3	
AP-42 Ch. 12.10		SO2	1.25	120.45	120.45		
		NOx	0.10	9.64	9.64		
		VOC	0.18	17.34	17.34		
		CO	145.00	13972.20	2095.83	afterburner	85.00%
		Lead	0.50	48.18	48.18		

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 11-1 for a process weight rate of 22 tons per hour:

P= 22 tons/hr

by interpolation:

 $limit = 42 - (((50000 - 44000)/(50000 - 40000)) \times (42 - 36)) = 38.4 lb/hr (allowable)$

with potential:

13.3 tons/yr x 2000 lb/ton / 8760 hr/yr = 3.0 lb/hr (will comply)

Golden Casting Corporation

1616 Tenth Street, Columbus, Indiana 47201

T005-6001-00006 Plant ID 005-00006

Process:	Rate	Pollutant	Ef	Ebc	Eac	Type of control	Control Efficiency
	(tons iron/hr)		(lb/ton produced)	(ton/yr)	(ton/yr)		(%)
Pouring/Casting	18.0	PM	4.20	331.13	16.56	baghouse	95.0%
SCC# 3-04-003-20		PM-10	2.60	204.98	10.25	BH16	95.0%
Moldmaster Pouring		SO2	0.02	1.58	1.58		
315		NOx	0.01	0.79	0.79		
		VOC	0.14	11.04	11.04		
		HAPs	0.01387	1.09	1.09		

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates greater than 30 tons per hour:

P= 123 tons/hr

Note: P includes weight of metal and weight of molds and cores.

limit =

55.0 x (

123 ^0.11) - 40 =

53.4 lb/hr

(allowable)

with potential:

16.6 tons/yr x

2000 lb/ton /

8760 hr/yr =

3.8 lb/hr

(will comply)

Process:	Rate	Pollutant	Ef	Ebc	Eac #1	Eac #2	Type of control	Control Efficiency
	(tons iron/hr)		(lb/ton produced)	(ton/yr)	(ton/yr)	(ton/yr)		(%)
Castings Cooling	18.0	PM	1.40	110.38	5.52	0.28	baghouses	95.0%
SCC# 3-04-003-25		PM-10	1.40	110.38	5.52	0.28	BH12 and BH13	95.0%
Moldmaster Cooling		SO2	0.00	0.00	0.00	0.00		
316/317		NOx	0.00	0.00	0.00	0.00		
		VOC	0.00	0.00	0.00	0.00		
	•	HAPs	0.01387	1.09	1.09	1.09		

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates greater than 30 tons per hour:

P= 123 tons/hr

Note: P includes weight of metal and weight of molds and cores.

limit =

55 x (

123 ^0.11) - 40

53.4 lb/hr

(allowable)

with potential:

0.3 tons/yr x

2000 lb/ton /

8760 hr/yr =

0.1 lb/hr

(will comply)

T005-6001-00006 Plant ID 005-00006

Process:	Rate	Pollutant	Ef	Ebc	Eac	Type of control	Control Efficiency
	(tons iron/hr)		(lb/ton produced)	(ton/yr)	(ton/yr)		(%)
Castings Shakeout	18.0	PM	3.20	252.29	12.61	baghouse	95.0%
Moldmaster Shakeout		PM-10	2.24	176.60	8.83	BH1	
318/320		SO2	0.00	0.00	0.00		
SCC# 3-04-003-31		NOx	0.00	0.00	0.00		
AP-42 Ch. 12.10		VOC	1.20	94.61	94.61		
		HAPs	0.01387	1.09	1.09		

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates greater than 30 tons per hour:

123 tons/hr

Note: P includes weight of molds and cores.

limit = $55 \times (123^{\circ}0.11) -40 =$

53.4 lb/hr (allowable)

with potential:

12.6 tons/yr x 2000 lb/ton / 8760 hr/yr = 2.9 lb/hr (will comply)

Process:	Rate	Pollutant	Ef	Ebc	Eac	Type of control	Control Efficiency
	(tons iron/hr)		(lb/ton produced)	(ton/yr)	(ton/yr)		(%)
Pouring/Casting	7.0	PM	4.20	128.77	128.77		
SCC# 3-04-003-20		PM-10	2.60	79.72	79.72		
Stationmaster Pouring		SO2	0.02	0.61	0.61		
342		NOx	0.01	0.31	0.31		
		VOC	0.14	4.29	4.29		
		HAPs	0.01387	0.43	0.43		

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

P= 47 tons/hr Note: P includes weight of metal and weight of molds and cores.

limit = $55 \times (47^{\circ}0.11) - 40 = 44.0 \text{ lb/hr}$ (allowable)

with potential:

128.8 tons/yr x 2000 lb/ton / 8760 hr/yr = 29.4 lb/hr (will comply)

Golden Casting Corporation

1616 Tenth Street, Columbus, Indiana 47201

T005-6001-00006 Plt ID 005-00006

Process:	Rate	Pollutant	Ef	Ebc	Eac	Type of control	Control Efficiency
	(tons iron/hr)		(lb/ton produced)	(ton/yr)	(ton/yr)		(%)
Castings Cooling	7.0	PM	1.40	42.92	42.92		
SCC# 3-04-003-25		PM-10	1.40	42.92	42.92		
Stationmaster Cooling		SO2	0.00	0.00	0.00		
343		NOx	0.00	0.00	0.00		
		VOC	0.00	0.00	0.00		
		HAPs	0.01387	0.43	0.43		

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

47 tons/hr

Note: P includes weight of metal and weight of molds and cores.

limit =

55 x (

47 ^0.11) - 40

44.0 lb/hr

(allowable)

with potential:

42.9 tons/yr x

2000 lb/ton /

8760 hr/yr =

9.8 lb/hr

(will comply)

Process:	Rate	Pollutant	Ef	Ebc	Eac	Type of control	Control Efficiency
	(tons iron/hr)		(lb/ton produced)	(ton/yr)	(ton/yr)		(%)
Castings Shakeout	7.0	PM	3.20	98.11	4.91	baghouse	95.0%
Stationmaster Shakeout		PM-10	2.24	68.68	3.43	BH15	
344		SO2	0.00	0.00	0.00		
SCC# 3-04-003-31		NOx	0.00	0.00	0.00		
AP-42 Ch. 12.10		VOC	1.20	36.79	36.79		
·		HAPs	0.01387	0.43	0.43		

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

47 tons/hr

Note: P includes weight of molds and cores.

limit =

55 x (

47 ^0.11) -40

44.0 lb/hr

(allowable)

with potential:

4.9 tons/yr x

2000 lb/ton /

8760 hr/yr =

1.1 lb/hr

(will comply)

T005-6001-00006 Plt ID 005-00006

Process:	Rate	Pollutant	Ef	Ebc	Eac	Type of control	Control Efficiency
	(tons iron/hr)		(lb/ton produced)	(ton/yr)	(ton/yr)		(%)
Pouring/Casting	2.0	PM	4.20	36.79	3.68	rotoclone	90.0%
SCC# 3-04-003-20		PM-10	2.60	22.78	2.28	RC2	
Slinger Pouring		SO2	0.02	0.18	0.18		
374		NOx	0.01	0.09	0.09		
		VOC	0.14	1.23	1.23		
	<u> </u>	HAPs	0.01387	0.12	0.12		

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

P= 10 tons/hr Note: P includes weight of metal and weight of molds and cores.

limit = $4.1 \times ($ 10 ^0.67) = 19.2 lb/hr (allowable)

with potential:

3.7 tons/yr x 2000 lb/ton / 8760 hr/yr = 0.8 lb/hr (will comply)

Process:	Rate	Pollutant	Ef	Ebc	Eac	Type of control	Control Efficiency
	(tons iron/hr)		(lb/ton produced)	(ton/yr)	(ton/yr)		(%)
Castings Cooling	2.0	PM	1.40	12.26	12.26	rotoclone	
SCC# 3-04-003-25		PM-10	1.40	12.26	12.26	RC2	
Slinger Cooling		SO2	0.00	0.00	0.00		
375		NOx	0.00	0.00	0.00		
		VOC	0.00	0.00	0.00		
		HAPs	0.01387	0.12	0.12		

T005-6001-00006 Plt ID 005-00006

Process:	Rate	Pollutant	Ef	Ebc	Eac	Type of control	Control Efficiency
	(tons iron/hr)		(lb/ton produced)	(ton/yr)	(ton/yr)		(%)
Castings Shakeout	2.0	PM	3.20	28.03	2.80	rotoclone	90.0%
Slinger Shakeout		PM-10	2.24	19.62	1.96	RC2	
376		SO2	0.00	0.00	0.00		
SCC# 3-04-003-31		NOx	0.00	0.00	0.00		
AP-42 Ch. 12.10		VOC	1.20	10.51	10.51		
•		HAPs	0.01387	0.12	0.12		

T005-6001-00006 Plt ID 005-00006

Process:	Rate	Pollutant	Ef	Ebc	Eac	Type of control	Control Efficiency
	(tons iron/hr)		(lb/ton produced)	(ton/yr)	(ton/yr)		(%)
Castings Cleaning	18.000	PM	17.00	521.22	26.06	baghouse	95.0%
and Finishing		PM-10	1.70	52.12	2.61		
42 Blast		SO2	0.00	0.00	0.00		
SCC# 3-04-003-40		NOx	0.00	0.00	0.00		
AP-42 Ch. 12.10		VOC	0.00	0.00	0.00		

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

P= 18 tons/hr

limit = $4.10 \times ($ 18 $^{\circ}0.67)$ = 28.4 lb/hr (allowable)

with potential:

26.1 tons/yr x 2000 lb/ton / 8760 hr/yr = 6.0 lb/hr (will comply)

Process:	Rate	Pollutant	Ef	Ebc	Eac	Type of control	Control Efficiency
	(tons iron/hr)		(lb/ton produced)	(ton/yr)	(ton/yr)		(%)
Castings Cleaning	7.000	PM	17.00	521.22	26.06	baghouse	95.0%
and Finishing		PM-10	1.70	52.12	2.61		
Shot blasting		SO2	0.00	0.00	0.00		
SCC# 3-04-003-40		NOx	0.00	0.00	0.00		
AP-42 Ch. 12.10		VOC	0.00	0.00	0.00		

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

P= 7 tons/hr

limit = $4.10 \times ($ $7^{0.67}) = 15.1 \text{ lb/hr}$ (allowable)

with potential:

26.1 tons/yr x 2000 lb/ton / 8760 hr/yr = 6.0 lb/hr (will comply)

Above calculated for the following shot blasting machines: N. Tumble Blast (443-1); M Tumble Blast (443-2); and S. Tumble Blast (443-3).

T005-6001-00006 Plt ID 005-00006

Process:	Rate	Pollutant	Ef	Ebc	Eac	Type of control	Control Efficiency
	(tons iron/hr)		(lb/ton produced)	(ton/yr)	(ton/yr)		(%)
Castings Cleaning	7.500	PM	17.00	558.45	27.92	baghouse	95.0%
and Finishing		PM-10	1.70	55.84	2.79	BH11	
North Pangborn Blast		SO2	0.00	0.00	0.00		
SCC# 3-04-003-40		NOx	0.00	0.00	0.00		
AP-42 Ch. 12.10		VOC	0.00	0.00	0.00		

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

P= 7.5 tons/hr

limit = $4.10 \times ($ $7.5^{\circ}0.67)$ = 15.8 lb/hr (allowable)

with potential:

27.9 tons/yr x 2000 lb/ton / 8760 hr/yr = 6.4 lb/hr (will comply)

Process:	Rate	Pollutant	Ef	Ebc	Eac #1	Eac #2	Type of control	Control Efficiency
	(tons iron/hr)		(lb/ton produced)	(ton/yr)	(ton/yr)	(ton/yr)		(%)
Castings Cleaning	30.000	PM	17.00	2233.80	111.69	5.58	baghouse	95.0%
and Finishing		PM-10	1.70	223.38	11.17	0.56	BH10	95.0%
BMD Blast		SO2	0.00	0.00	0.00	0.00		
SCC# 3-04-003-40		NOx	0.00	0.00	0.00	0.00		
AP-42 Ch. 12.10		VOC	0.00	0.00	0.00	0.00		

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

P= 30 tons/hr Note: P includes weight of metal and weight of molds and cores.

limit = $55 \times (30^{\circ}0.11) - 40 = 40.0 \text{ lb/hr}$ (allowable)

with potential:

5.6 tons/yr x 2000 lb/ton / 8760 hr/yr = 1.3 lb/hr (will comply)

Above calculated for Plant 1 Blast machine (450).

Golden Casting Corporation

1616 Tenth Street, Columbus, Indiana 47201

T005-6001-00006 Plt ID 005-00006

Process:	Rate	Pollutant	Ef	Ebc	after rotoclone	Type of control	Control Efficiency
	(tons sand/hr)		(lb/ton produced)	(ton/yr)	(ton/yr)		(%)
Sand Handling	105	PM	3.6	1655.6	165.6	rotoclone	90.00%
EPA SCC# 3-04-003-50		PM-10	0.54	248.3	24.8	RC1	
Moldmaster Sand Sys.							

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates greater than 30 tons per hour:

P= 105 tons/hr

limit = $55 \times (105^{\circ}0.11)$ - 40 = 51.8 lb/hr (allowable)

with potential:

165.6 tons/yr x 2000 lb/ton / 8760 hr/yr = 37.8 lb/hr (will comply)

Process:	Rate	Pollutant	Ef	Ebc	Eac	Type of control	Control Efficiency
	(tons sand/hr)		(lb/ton produced)	(ton/yr)	(ton/yr)		(%)
Sand Handling	40	PM	3.6	630.7	31.5	baghouse	95.00%
EPA SCC# 3-04-003-50		PM-10	0.54	94.6	4.7	BH15	

Stationmaster Sand Sys.

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates greater than 30 tons per hour:

P= 40 tons/hr

limit = $55 \times (40^{\circ}0.11) -40 = 42.5 \text{ lb/hr}$ (allowable)

with potential:

31.5 tons/yr x 2000 lb/ton / 8760 hr/yr = 7.2 lb/hr (will comply)

Golden Casting Corporation

1616 Tenth Street, Columbus, Indiana 47201

T005-6001-00006 Plt ID 005-00006

Process:	Rate	Pollutant	Ef	Ebc	Eac	Type of control	Control Efficiency
	(tons sand/hr)		(lb/ton produced)	(ton/yr)	(ton/yr)		(%)
Sand Handling	8	PM	3.6	126.1	12.6	rotoclone	90.00%
EPA SCC# 3-04-003-50		PM-10	0.54	18.9	1.9	RC2	
Slinger Sand Sys.					•		

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

P= 8 tons/hr

limit = $4.1 \times ($ 8 ^0.67) = 16.5 lb/hr (allowable)

with potential:

12.6 tons/yr x 2000 lb/ton / 8760 hr/yr = 2.9 lb/hr (will comply)

Process:	Rate (tons sand/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control	Control Efficiency (%)
Core sand handling	123	PM	3.6	1939.46	19.39	cartridge	99.0%
		PM-10	0.54	290.92	2.91	filter	
		SO2	0.00	0.00	0.00		
		NOx	0.00	0.00	0.00		
AP-42 Ch. 12.10		VOC	0.00	0.00	0.00		

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates greater than 30 tons per hour:

P= 123 tons/hr

limit = $55 \times ($ 123 \(^0.11 \) -40 = 53.4 \(\text{lb/hr}\) (allowable)

with potential:

19.4 tons/yr x 2000 lb/ton / 8760 hr/yr = 4.4 lb/hr (will comply)

Methodology:

Ef = Emission factor

Ebc = Potential Emissions before controls = Rate (units/hr) x Ef(lbs/unit) x 8760 hrs/yr / 2000 lbs/hr

Eac = Potential Emissions after controls = (1-effiency/100) x Ebc

1 lb = 2000 tons

Appendix A: Emission Calculations

Company Name: Golden Casting Corporation

Plant Location: 1616 Tenth Street, Columbus, Indiana 47201

County: Bartholomew County

Permit Reviewer: Nisha Sizemore
Title V #: T005-6001-00006
Plt. ID #: 005-00006

Isocure Core Making Process

Machine	Date of Construction	Capacity (tons cores/hr)	VOC Emission Factor from Resin Evaporation (lb/ton cores)	Max TEA Usage (lb TEA/ton cores)	Emissions from resin evap (tons/yr)	Potential TEA Emissions from TEA usage (tons/yr)	Total Potential VOC Emissions (tons/yr)	
202 (1 machine)	1986	1	1.2	2	5.256	(toris/yr) 8.76	14.016	
203 (1 machine) Total	1986	1	1.2	2	5.256	8.76	14.016 28.032	
204 (2 machines)	1993	2	1.2	2	10.512	17.52	28.032	

OCMA study shows an emission factor of 0.65 lb/ton of cores for VOC emissions from resin evaporation, based on 1% resin usage. The calculations for this source use an emission factor of 1.2 lb/ton of cores for VOC emissions from resin evaporation, in order to provide a conservative estimate. This source uses a maximum resin content of 1.2%.

Limits Necessary to render 326 IAC 8-1-6 (BACT) not applicable:

Core Machines	VOC limit (tons/yr)	VOC EF for resin evaporation	VOC EF for resin evaporation	TEA EF (lb/ton cores)	core production	TEA usage limit (lbs/yr)	resin usage limit (lbs/yr)
		(lb/ton cores)	(lb VOC/lb resin)		(tons cores/yr)		
202 and 203	24.9	1.2	0.05	2	15,563	31,125	373,500
204	24.9	1.2	0.05	2	15,563	31,125	373,500